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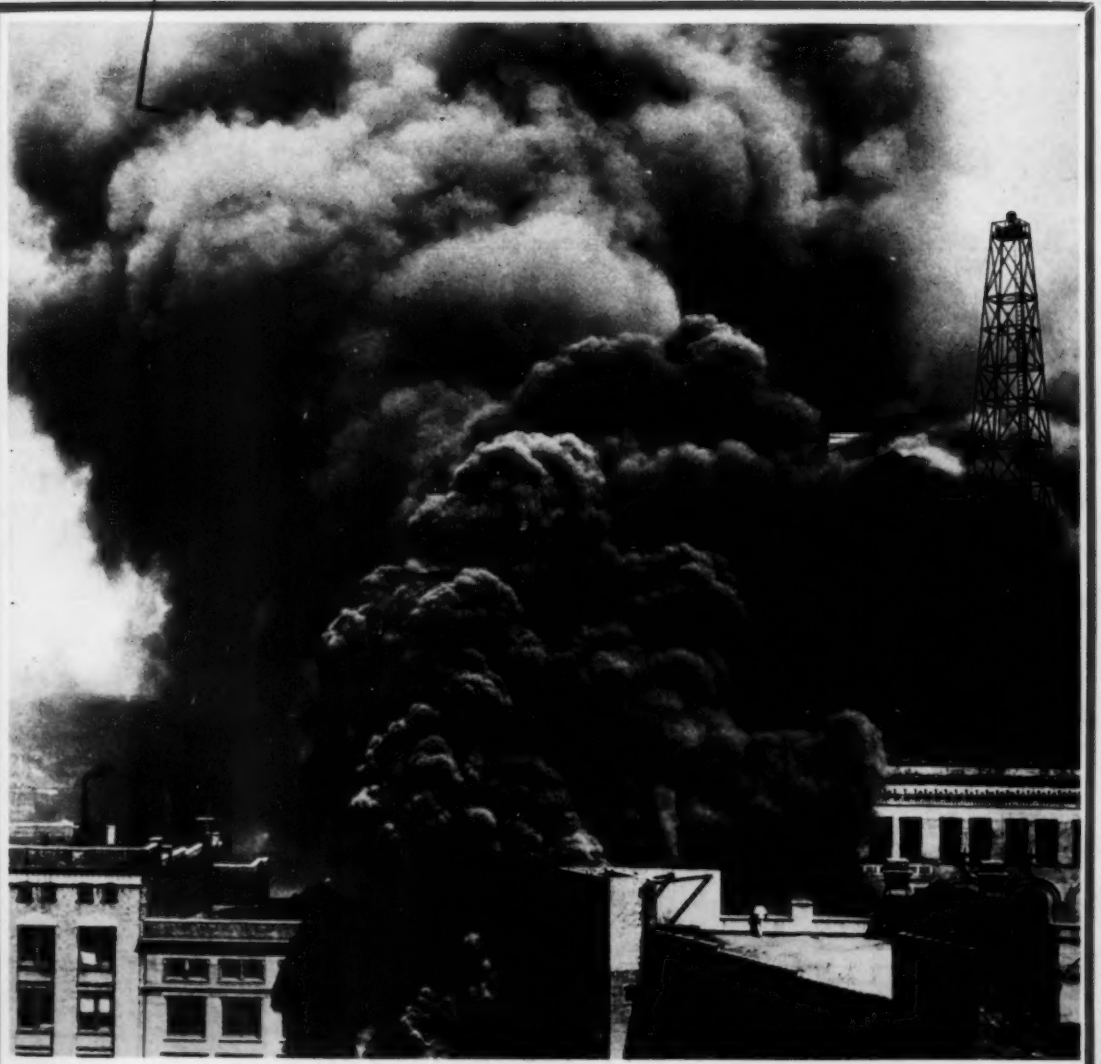
The Journal of the Fire Protection Profession

AUGUST 19, 1931



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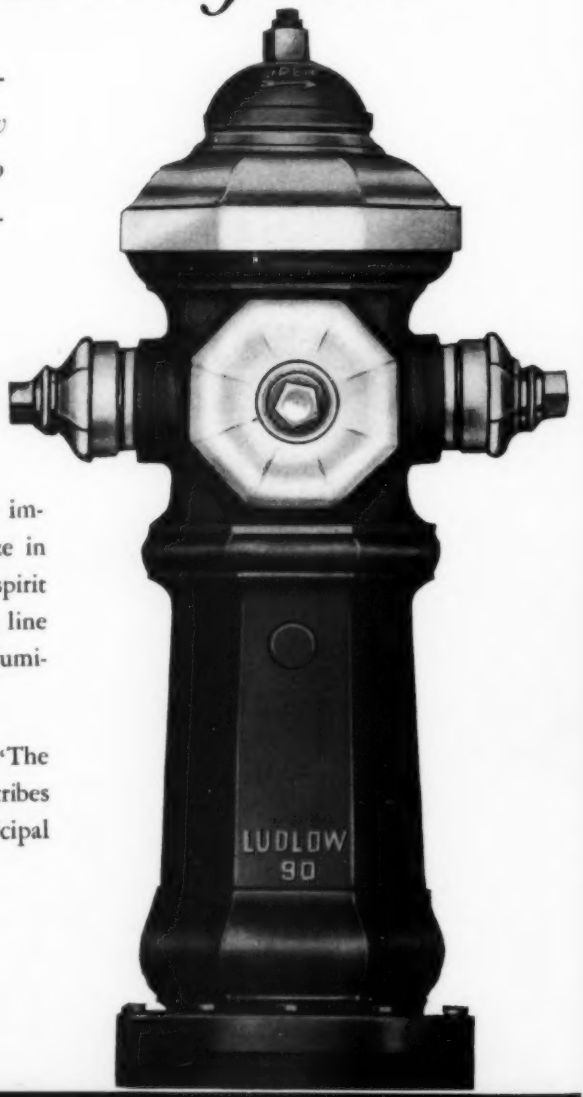

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The Publishers

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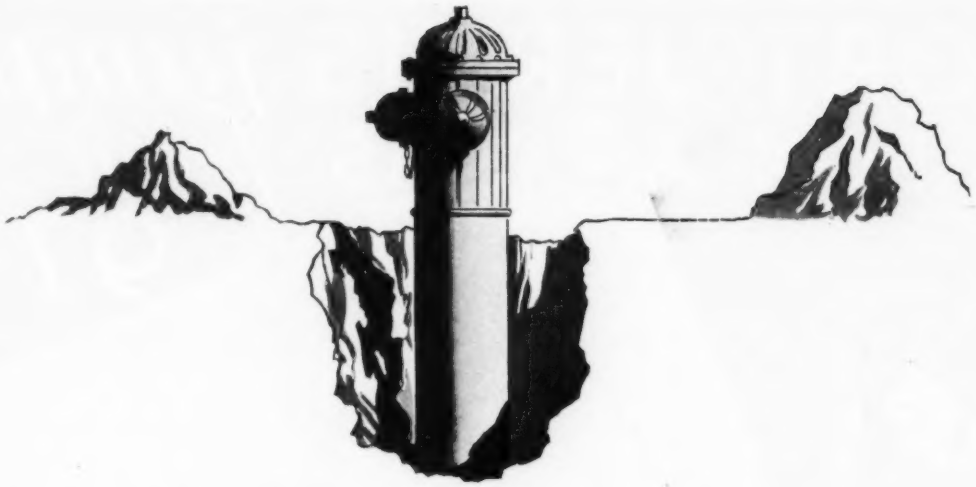

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One shovelful of dirt. Multiply it by the number of shovelfuls that are removed and returned when it is necessary to replace the valve seat in a hydrant. Multiply again by the number of hydrants in the city—multiply again by all the necessary inspections to come. That's how much expense Darling Hydrant standardization will save.

To inspect a Darling Hydrant you have only to remove the six bolts from top of hydrant. The packing plate, follower, and operating nut come off as one part by unscrewing operating nut from valve rod.

Then by screwing the valve stem to the left with a seat wrench the entire inner workings, including MAIN VALVE SEAT, SEAT GASKET and DRIP VALVE SEATS may be lifted out for inspection.

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Fire Hydrants

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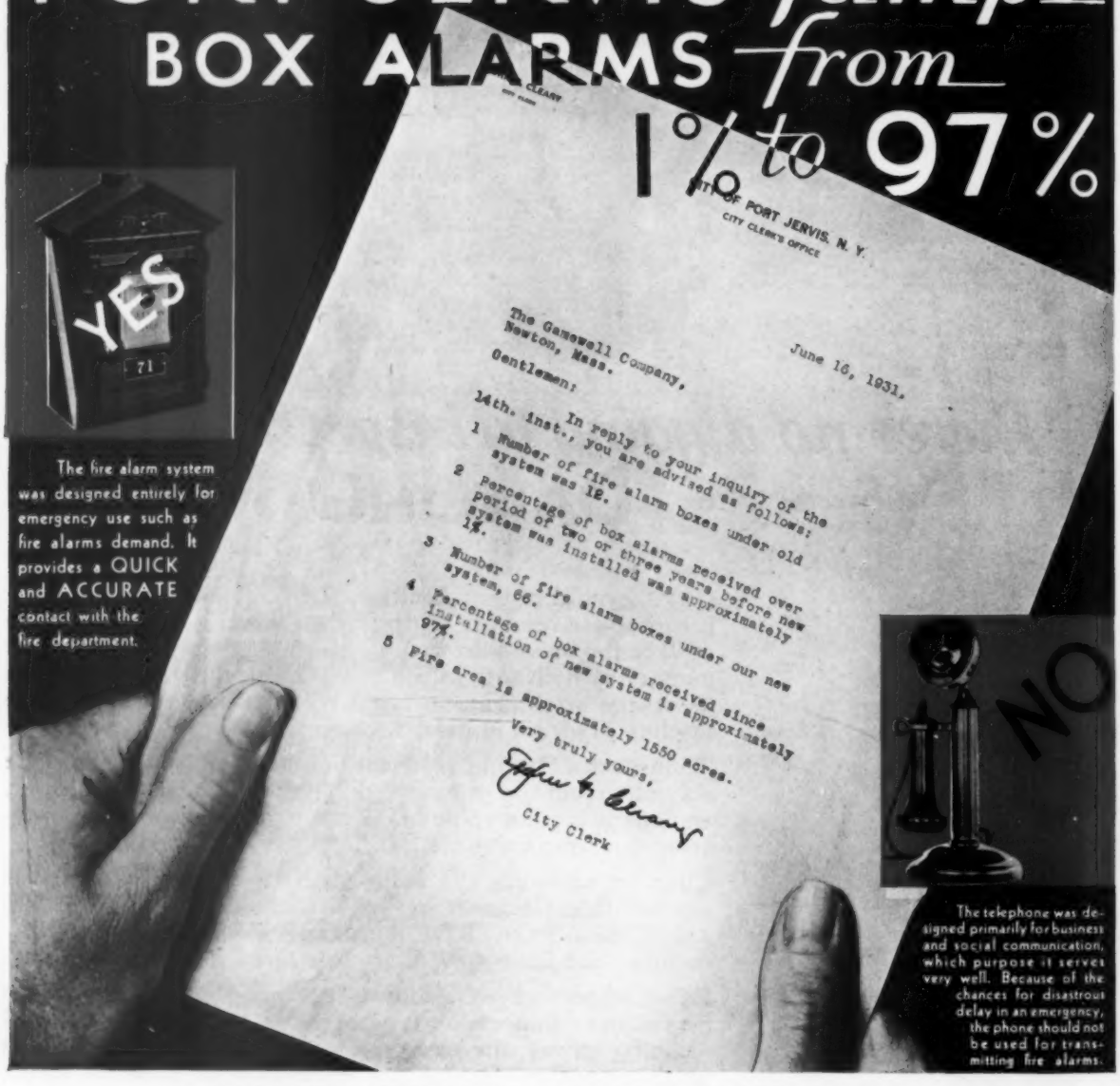
The fire alarm system was designed entirely for emergency use such as fire alarms demand. It provides a QUICK and ACCURATE contact with the fire department.



CITY OF PORT JERVIS, N. Y.
CITY CLERK'S OFFICE

June 16, 1931.

The Gamewell Company,
Newton, Mass.

Gentlemen:

In reply to your inquiry of the 14th. inst., you are advised as follows:

1 Number of fire alarm boxes under old system was 12.

2 Percentage of box alarms received over period of two or three years before new system was installed was approximately 1%.

3 Number of fire alarm boxes under our new system, 66.

4 Percentage of box alarms received since installation of new system is approximately 97%.

5 Fire area is approximately 1550 acres.

Very truly yours,

City Clerk

The telephone was designed primarily for business and social communication, which purpose it serves very well. Because of the chances for disastrous delay in an emergency, the phone should not be used for transmitting fire alarms.

INCREASE YOUR FIRE ALARM BOX DISTRIBUTION AND YOU INCREASE YOUR BOX ALARMS

SINCE alarms received through fire alarm boxes are the only safe ones, it is naturally the object of every fire chief to maintain a high percentage of box alarms. Unless you install an adequate number of fire alarm boxes from year to year in order to keep in step with the growth of your city, it will be impossible for you to maintain the much desired high percentage of box alarms.

Naturally, if your city has no fire alarm boxes at all, it can receive no box alarms. If your city has only one-quarter or one-half of its requirements, it will receive only one-quarter or one-half of the box alarms that it should. That is simple logic.

The letter from Mr. J. F. Cleary, City Clerk of Port Jervis, N. Y., reproduced on this page, offers practical evidence of this fact. By increasing the number of fire alarm boxes from 12 to 66, Port Jervis increased its box alarms from 1% to 97%. By increasing the fire alarm box distribution in your own city, you too can increase the percentage of your box alarms.

THE GAMEWELL COMPANY
NEWTON, MASSACHUSETTS
"A Box A Block"

FIRE ENGINEERING

(A Consolidation of Fire and Water Engineering and The Fire Engineer)

The Journal of the Fire Protection Profession

VOLUME LXXXIV AUGUST 19, 1931 NUMBER 17

Fire Fighting Equipment for Small Towns

Such Equipment Must Be Divided Into Three Classes; Mental, Physical and Mechanical—Problems to Be Met

By CHIEF J. W. RANDLETTE, Fire Department, Richmond, Me.

The problems of the small town, while special ones and quite diverse from that of the large city, are, according to this author, fully as many and as difficult as those that confront the Chief of the big municipality. These problems are admirably handled in the paper which follows:

Chief J. W. Randlette

THE knowledge I have gained as a small town chief, has been obtained entirely from experience, observation and from engineering articles on fire-fighting methods. I have not had the advantage of fire school and fire college instruction.

Perhaps the subject, "Equipment for Small Towns," was assigned with the basic idea of mechanical equipment, but this does not to my mind constitute the complete idea of equipment. Three elements enter into the equipment of any Fire Department, and this is true of the small town. Equipment should be divided into three classes namely: mental, physical and mechanical.

If we had the best possible mechanical equipment, without the mental equipment to handle it intelligently, and the physical equipment to withstand the strain and exertion, what would it amount to? So in treating the subject before us, let us consider these three essential component parts. There are very few towns of 2,500 inhabitants, particularly in Maine, that have been built up under such classification, and perhaps this will hold true of all towns in New England.

Before we consider the matter of equipment, some thought should be given to the conditions that have to be met by the small town department. I am going to make the statement that the problems of the small town chief are of as great a variety and as manifold—and perhaps even greater—than the head of the large city department is called upon to solve. This may seem a very broad statement, but a review of some of the conditions I believe will verify this fact. Conditions and the variety of hazards which are ever present in the small town, must, to a considerable extent, govern the style of mechanical equipment. What are a few of these conditions?

Hazard of Building Construction

An ever present hazard in the small town, is the style of building and its construction; 95% of the buildings are of frame, of what the city Chief terms joist construction, and the majority of manufacturing plants are of the same material, wood floors and unfinished walls. There are the three and four story wooden shoe factories 300 feet long and 50 or 60 feet wide, built L shape; three and four story plants, with brick walls and wood inside construction; two story plants, 200 feet long and sixty feet wide all frame. Some of these have sprinkler equipment, some have not. Garages are wooden frame buildings with wood floors, gasoline and oil soaked. The average business section of the small town, too, is composed almost entirely of wooden buildings, and in many cases abut against the building on either side without any intervening space. Think of the exposure in such a case, if a fire once gets away! In the residential section, many places have large fields adjacent to the buildings and thus the grass fire hazard in the fall and spring is always present. Railroads running through the center of villages and through wooded land makes the hazard from flying cinders into dry flammable material an always present hazard, and a grass fire started from a train will travel faster than a person can run. Roof coverings of nearly all buildings are of wood shingle, and when they are a few years old and the weather begins to affect them, they curl up and just wait for a spark to land under one of them; the roof is gone before you can turn around.

We have a condition in my town on the main business street, where for three hundred feet, beginning with a four

"Equipment consists of three factors—mental, physical and mechanical. Mentally, men should be picked who are of more than ordinary intelligence; physically, they should be picked for their ability to handle the equipment furnished them and be able to stand the long grind when necessary. The mechanical equipment should be the best you are able to purchase and some for every kind of problem that must be met sooner or later."

story wooden hotel, there is a solid block of wooden stores, with dwellings above, without any space between them. We all dread to hear the fire alarm call us to this locality. We will probably get it some day. There was a call recently in the early morning for a fire at this hotel. A spark from a chimney landed on the roof of old dried up shingles; fortunately it was seen before it got a start, and we extinguished it with the booster tank of the pumper. We have the usual gas filling stations and gasolene and and oil storage tanks.

Cover a Large Country District

We have the country district to cover. Our town is thirty-five square miles in area, and we also answer calls to a town across the river, and have to depend on a ferry crossing, the ferry boat being propelled by a motor boat with gasolene engine. This town across the river is all farming section. We also answer calls in the northern part of the town next south of us. In the country district we have the hazard of the portable saw mill; the fishermen along the banks of streams in the spring, and the hunters in the fall, with the always present smoking material. The forestry section is large and we have had three bad fires start from unknown causes in these sections this year but have been able to control them with the loss of only one building. The Fire Department is expected to take care of all of these hazards.

The Moral Hazards

What about the moral hazards? A very serious problem of the small town Chief are the appropriations necessary to carry on his work. It is practically impossible to make the voting population of the small town see the necessity of providing for something that hasn't happened—they only lock the stable after the horse has gone! They will pay the salary of a single man in police uniform to guard a village of 1,600, and they will give a Fire Department of forty men about the same amount to protect 35 or 40 miles of territory, covered by forest land, dwellings and business property, to say nothing of manufacturing plants.

When we want an appropriation for fire equipment, we have to go to town meeting and put it up to the people. We haven't any Mayor and his Council to put the matter up to; it is an easy matter to convince a few thinking men of the necessity of new equipment, but when you try to convince 700 or 800 voters and tax payers, assembled in town meeting, it is another proposition. The tax payer sees only an increase in his taxes, and he will ask you if you cannot get along without it for another year. Then, when something happens, he wonders why we were not prepared for the emergency. It has been said in Chiefs' conventions, "there cannot be an emergency if you are prepared." What a mighty word two letters make—"if"! I can assure you that there are plenty of towns in New England that can have an emergency.

Barge Fire Menaces 75 Tanks of Oil at Perth Amboy

An explosion on a small barge used to carry oil to vessels anchored in the Raritan River, menaced seventy-five tanks of oil at Perth Amboy, N. J. The fire swept over the pier of the Shell Petroleum Products Company at Perth Amboy. In addition to the pier the explosion started fires on a tug, a tanker and another barge.

The Audible Fire Alarm Hazard

Another moral hazard of the small town, is the audible fire alarm system; every man from the Chief down must be a call man, permanent men cannot be employed, and they are called by the audible fire alarm system. Everybody in town knows as soon as the firemen that a fire is in progress, and small town folks are curious. The way they flock to a fire is surprising and where they come from is another surprising feature. Our men are instructed to drive to a fire in a safe manner and at a safe speed consistent with the necessity of getting there quickly, but we have had pleasure cars pass the apparatus as though we were parked or going in the other direction. We have had to threaten prosecution, but when a fire truck has a fire ahead of it, the men are not observing number plates, to see who the offender is.

At a recent American Legion minstrel show in our town, an end man threw at the interlocutor the question "What is the difference between the fire department in Richmond and the one in Boston?" "Why" exclaimed the interlocutor, "there are all kinds of differences; the Boston department is larger, has more men, more apparatus"—The end man interupted him, "You are all wet; the difference, is, in Boston the crowd follows the fire engine, in Richmond the fire engine follows the crowd." Sometimes that is true, although it was intended for a joke, as I happened to be the interlocutor.

Police Protection at Fires Inadequate

Fire police protection in the small town is far from adequate to give the Fire Department the right of way. If strenuous methods were not used when the fire location is reached, the firemen could not get near the fire because of the public. We now have men of the department detailed to stop the entrance into the fire lines of anybody not a member of the department, under orders of an officer. This constitutes a serious moral hazard.

Another moral hazard of the small town Chief is the fact that when the fire alarm calls the apparatus, the whole department is called. There are not any reserves to fall back upon; towns are generally widely separated by miles of highway, other departments have a long way to travel, experienced men are not available. The fire in the small town, be it large or small, must be fought out on the first call. Officers must have good judgment and think quickly. A mistake is a serious thing, for when we lose a building the chances are that it will not be rebuilt. Fires must be stopped in the incipient stage, if possible, and with small damage in order to save property for the town, for a building not rebuilt means so much valuation gone. I have given a brief mental picture of the hazards, or some of them.

The Matter of Equipment

Now for equipment. The following are suggestions for towns up to 2,500 inhabitants: I have previously stated that equipment consists of three factors, mental, physical and mechanical. Mentally, men should be picked who are of more than ordinary intelligence; men who are willing to learn and obey instructions; who are willing to devote a part of their time to reading fire methods, and be taught that the days of drowning out fires from the outside is a thing of the past; that they must protect property against unnecessary damage, as well as extinguish the fire.

Physically men should be picked for their physical condition; they should be men able to handle the equipment furnished them; men able to stand the long grind when necessary; men who do not have any fear for themselves, but have the problem of life and property uppermost in their minds.

Mechanical Equipment

The mechanical equipment should be the best you are able to purchase, and some for every kind of problem that must be met sooner or later. The most important is some kind of motor equipment, to enable men to get to a fire location quickly, as the first five minutes are the most important. This motor equipment, if possible, should be either quadruple or the triple combination type. If not, it should carry first aid fire equipment with chemical tanks. If a village is provided with hydrant service, there should be at least two feet of 2½-inch hose per capita, this would care for a reload of dry hose. There should be a reducing coupling for 1½-inch hose to use inside to prevent heavy water damage. If the

Some Important Opinions and Decisions by Courts on the

Legal Status of Pension Laws

Legislatures May Not Direct, But May Authorize City Councils to Enact Pension Laws—Pension Acts Revokable But Not Retroactive

By LEO T. PARKER, Attorney-at-Law

THE Constitutions of many states prohibit its Legislature from imposing taxes for the purposes of any county, city, town or other municipal corporation, but it may, by general laws, confer on the proper authorities the power to assess and collect such taxes. In other words, ordinarily state laws directing City Councils to enact laws for payment of pensions to municipal firemen are void, whereas a law authorizing a City Council, but leaving it discretionary, to pass an ordinance is valid.

Therefore, various Courts have held laws invalid which command the City Council to create and provide for a pensioning system for disabled firemen and their dependents, although it is generally recognized that laws of this nature are advantageous and desirable.

For example, in Campbell vs. Board of Trustees of Fireman's Pension Fund, 31 S. W. (2d) 620, it was disclosed that a city ordinance provided that disabled members of the municipal Fire Department were entitled to a pension of $30 a month. This ordinance was enacted by authority of a state law making it discretionary for cities to pass laws of this nature. In 1928 the Legislature enacted another law or amendment which mandatorily required that the city, through its legislative department, should adopt and provide for a system of pensions for injured firemen and their dependents if killed in service, instead of leaving the matter to the discretion of the Council and merely vesting it with the authority and power to do so. This law was designed to increase the pension from $30 to $60 per month, and authorized the Council to increase taxes for the purpose of providing funds for payment of the increased pension.

Certain disabled firemen filed suit to compel the City Council to enact the ordinance required by the state law and to increase the tax rate to the maximum provided for in the 1928 amendment, so as to create a fund sufficient to meet its requirements. In holding the 1928 amendment invalid, this Court said:

"It may be that in all strictness the creation and provisions for fire departments in municipalities is not strictly a private affair of the municipality like some other engagements in which they are permitted to embark; but nevertheless it is strictly a local, and therefore a municipal governmental function, with which the state has nothing to do, and in which it is not concerned . . . but that it would be competent for the Legislature to authorize and empower the legislative authority of such corporation in its discretion to do so. . . . The holding that the creation of a Fire Department, and matters pertaining to and regulating it, was strictly a local matter upon which the state by its Legislature could not impose burdens upon the municipality, have never been criticized, but have constantly been adhered to in all of the later cases."

City Not Liable For Failure to Levy Taxes For Pension

Another important point of the established law is that a state law which provides for awarding pension to firemen constitutes an inducement to persons to enter and remain in service, and some Courts have held that the pension allowed is in the nature of compensation. Other Courts have held that pensions are mere bounties or gratuities allowed by law to retired or disabled officers and firemen. The validity of statutes enacted in the various states has, however, been uniformly sustained upon the ground that they are awarded for a public purpose and are not in any strict sense gifts or bounties. Statutes providing for mere gifts to such officers would clearly violate constitutional limitations. (171 N. E. 432)

Moreover, while the duty resting upon a municipality to provide a fund sufficient in accordance with a state law to make the monthly payments to its pensioners is mandatory, yet the duty to provide a fund with which to pay pensions is purely statutory and not contractual. In other words, the right of a fireman to demand and receive a pension is a purely legal one, and although under certain circumstances he may compel payment by a suit against the municipality or its officers, yet neither a city nor its officers is liable in damages for negligence in failing to levy taxes to provide sufficient funds to pay pensions. This is true because duties of this nature are governmental and not ministerial. So held a higher Court in the leading case of Lage vs. City of Marshalltown, 235 N. W. 761.

The facts of this case are that a state passed a law which imposed a duty on municipalities to levy annually a tax on property owners for the purpose of creating a firemen's pension fund. The annual tax thus to be levied shall not exceed one-half mill. The per cent of the levy to be made by municipalities for pension purposes is left to the discretion of the proper taxing agents of the municipality. Similar statutes are effective in numerous other states.

Where Lack of Funds Exist

The officials of a city failed to levy taxes equal to the limit of one-half mill with a result that there was not sufficient money with which to pay pensions to disabled and retired firemen.

A citizen, who was entitled to receive a pension, and who had received only a portion of it each month for many past months, filed suit against the city contending that the relationship between the municipality and the pensioner is contractual and therefore damages will lie for a breach thereof; and if not contractual, that the municipality is liable to the pensioner because of the carelessness and negligence of its officers in failing to make an appropriate levy to maintain an adequate fund on hand.

Notwithstanding this argument, it is important to know that the higher Court held the city not liable for payment of the full amount of the pensions due, and said:

"So far as we are advised, statutes similar in terms and purpose to our own which have been enacted in many states have never been held to establish a contractual relationship between the member of a fire department. . . . Having failed to levy a sufficient tax to meet the requirements of its pension fund, although having power and authority to do so,

SUBJECTS TREATED IN THIS ARTICLE:

- Legislatures May Not Command but May Authorize City Councils to Pass Pension Laws
- City Not Liable for Failure to Levy Taxes for Pensions
- Pension Law is Revokable
- Pension Not Retroactive
- Decision of Pension Board Held Final
- Distinction Between Pensions and Insurance

is the municipality liable in damages to the extent of the unpaid portion of the pensions due? . . . The precise question raised at this point has not previously been decided by this Court. It would seem quite clear, however, that the duty imposed upon municipalities in relation to firemen's pensions are governmental in character. It is the general rule that municipalities are not, in the absence of statute enacting such liability, liable in damages for the negligence or carelessness of its officers. . . . The municipality is not liable in damages for the failure of its proper officers to levy a sufficient tax to meet the demands of the pension fund created and maintained therby. No such liability exists either at common law or by statute in this state. The function delegated and imposed upon municipalities in relation to pensions for disabled or retired officers and firemen is, as stated, governmental in character, and an action for damages will not lie against such municipality."

Pension Law Revokable

It is well established that a pension is not a vested legal right but may be withdrawn and new laws formulated by state lawmaking bodies may be enacted at any time. In other words, a pension is considered a security to the beneficiaries which may be modified or taken away entirely by properly and legally enacted laws.

For illustration, in the late case of State vs. Jones, 174 N. E. 783, it was disclosed that previous to July 11, 1929, a state law provided for the creation, management, and distribution of a relief fund to municipal employes and under this law there was such a fund in the city managed by trustees.

By the amendment of the new law which became effective July 11, 1929, the old law, under which this fund had been created, and its disbursement entrusted to trustees, was specifically repealed. The new law created a new board of trustees empowered to "make all rules and regulations for distribution of the fund, including the qualifications of those to whom any portion of the fund shall be paid, and the amount thereof."

The trustees enacted new rules and regulations which resulted in an applicant not being entitled to receive a pension. Suit was filed on the grounds that since the applicant had a right under the old law to receive a pension, enactment of the new law could not withdraw this privilege. However, it is interesting to observe that the higher Court held the new law to supercede the old law, and stated the following important law:

"In considering this matter, it must be kept in mind that a pension of this character is in the nature of a gratuity, and that the law does not recognize a vested legal right to a pension to be granted by the government, nor in the continuance of a pension already granted, which the Legislature may not modify, or take away entirely, by repealing the statute providing for such pension; hence the Legislature had a perfect right to repeal said laws . . . and in this instance the Legislature failed to provide that the old rules or regulations should remain in force, but did make provisions which we think plainly indicate that there should be no right to be granted a pension after the new law became effective except in accordance with and under rules and regulations approved by the board of trustees created by the new law."

Pension Not Retroactive

Also, it is well settled that a law is not retroactive and does not entitle all applicants to receive pensions unless the provisions to this effect are clear and unambiguous. In other words, in order for a law to be retroactive, it must be shown conclusively that the framers or makers of such law intended that it revert to include within its scope all persons without regard to date of passage of the law.

For instance, in the late case of Staff vs. Firemen's Pension Board, 296 Pac. 417, it was disclosed that a state law provides:

"Any person, at the taking effect of this act, or thereafter, who shall have been duly appointed and enrolled, and has served for a period of twenty years or more in some Fire Department in the state . . . and his service in such Fire Department shall have ceased, shall be entitled to be retired from such service and shall be entitled to be paid from such fund a monthly pension equal to one-half of the salary attached to the rank which he may have held in said Fire Department, preceding the date of such retirement, whether said service be performed as a volunteer, or a member of a part paid or full paid department, in the event of the death of any person who has been awarded a pension under the provisions of this act, his widow, children or other persons wholly dependent on such person for support shall be paid the pension so awarded."

A widow of a fireman who died prior to date of passage of this law sued to recover the pension provided therein. In holding the widow not entitled to recover the pension, the Court said:

"The legal question was whether a widow of a fireman who died prior to the date of the amendment would continue to receive the pension that her deceased husband received. In other words, was it the intention of the Legislature to make the amendatory act retroactive so as to include the widow of a fireman who had died prior to the passage of the amendment. . . . We are unable to find in the words or provisions of the act that which satisfies our minds that it was the intention of the Legislature that it should have a retrospective effect. . . . There is nothing in the act that shows it was the intention of the Legislature to make it retroactive. If the intention to give the act a retrospective effect is not clearly found in the act, the doubt must be resolved against the retrospective effect and the act must be given prospective effect only. The language of the act seems clear that there was no intention to give it a retrospective effect. To give it such an effect the language of the act must show a clear intention on the part of the Legislature to do so. Since Mr. Stagg (fireman) died before the amendment was passed by the Legislature and since the Legislature did not make the act retroactive, the appellant (widow) cannot recover under the act."

Decision of Board Held Final

Generally speaking, a Board of Commissioners may decide finally whether a fireman shall receive a pension only when state laws delegate this authority.

For example, in the late case of State vs. Edwards, 295 Pac. 1017, a higher Court held that if a state law grants to pension trustees the right to hear and decide finally all applications for a pension, its decision is final if rendered in good faith and without prejudice.

The fireman became a member of the Fire Department January 1, 1921. July 17, 1922, he was injured while in the performance of his duties. As a result of the injury he was in the hospital for some weeks, and did not return to active duty for approximately five and one-half months, or January 1, 1923. December 20, 1925, while performing duties he injured his back in the region of the injury received July 17, 1922, aggravating the old injury, and causing him to retire from active duty for a period of eighty-one days. The Board allowed him full pay for sixteen days of this period, and placed him on the permanent disability list for the remaining sixty-five days, allowing him half pay the latter period. March 10, 1926, the fireman again returned to active duty, and subsequently did not apply for retirement. In April, 1927, he was, for cause, dismissed from the department. He made application to the Board for a pension based upon his disability received in the line of duty, but no action was taken upon this application. May 7, 1929, he again made application for a pension, and the Board declined to grant the application.

The fireman filed suit and requested the Court to compel the Pension Board to grant a pension.

However, a state statute provided:

"Said Board shall hear and decide all applications for such relief or pensions under this act, and its decisions on such applications shall be final and conclusive and not subject to revision or reversal except by the Board."

Therefore, in view of this law, the higher Court refused to grant the fireman a pension, and said:

"By this statute, the action of the Board is, in plain language, made final and conclusive, and it is expressly provided that the ruling thereof shall not be subject to revision or repeal, except by the Board. . . . It is said that the Board, in the present case, acted arbitrarily, in that it refused to hear the appellant and his counsel and permit them to present evidence. Assuming, without deciding (a) that the Board did act arbitrarily in this regard, and (b) that by reason of such arbitrary action relief was available to the appellant in an action of this character, mandamus, it

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New York City's Lunch Hour Crowds Get a Real Thrill

A truck loaded with mattresses caught fire at 43rd Street and Lexington Avenue, New York City. The fire did little damage except to the truck and its contents, but it did provide a real thrill for the lunch-hour crowds. The photograph was taken before the fire companies arrived.

The Volunteer Fire Department

By N. N. WOLPERT,
Assistant Editor, FIRE ENGINEERING

A Series of Articles on Volunteer Fire Department Administration and Operation.

This article, the seventh of a series, describes in detail the problem of giving outside aid both to the property owner residing outside of the corporate limits, and to the adjacent municipality. It also presents some of the charges made by Fire Departments for this class of emergency aid. If you are enjoying this series, or know of some way in which it may be improved, won't you please write this department?

FOR many miles around, Jeremiah Simms was respected as the most progressive farmer in the community. His barns, each fall, were always well stocked, his fields were cultivated in accordance with the best methods promulgated by the State Department of Agriculture, and the few cows he did have, were from the best stock obtainable But even the proud Mr. Simms could not protect himself against disaster.

One day while he was at the state fair, a hired hand discovered fire in a barn where hay was stored. When first aid methods failed to control the flames, the farm laborer called the chief of the Fire Department in a village five miles away:

"Hello! Hello! There's a good fire going up here. Where? Why up at Simms' place. Could you come out? If you don't I guess the whole place will go. What? No, this is not Mr. Simms calling."

"Are you or Mr. Simms members of the association?" questioned the Chief.

"Don't know. No, I guess we ain't. You come and my boss'll make it all right."

"Hold the wire," said the Chief as he thumbed through his index file.

No—Jeremiah Simms was not a member of the Rural Fire Protection Association. Again picking up the telephone receiver, the Chief said:

"Sorry, it's against the rules to go out to your place. I'll call up some of the boys who live near you to go over and help, but I can't take out the truck."

Jeremiah Simms is purely fiction. The Chief and the Association and the village exist solely because they were created to serve as an introduction to this article. But it is not far fetched to assert that there are many who can repeat experiences similar to that of Mr. Simms, and there are also many chiefs, who although they would like to help out rural neighbors who normally are without fire protection, are prevented from giving aid by some rule that has been in force for many years.

Individuals, and especially volunteer firemen, are inclined to be neighborly, but there are several outside agencies that prevent giving unrestricted assistance to an outside resident when an emergency occurs.

Rating Bureaus Protest

Where the village has a limited amount of fire apparatus, and it is the practice for the department to strip the village of its normal fire defense so that aid can be rushed to an outside point, the various fire insurance rating organizations have threatened to establish a higher insurance base rate, unless such a practice is discontinued. These rating experts argue that the base rate upon which individual rates are determined, was fixed on the assumption that the village or town had a certain amount of fire companies, a definite number of apparatus units, and an organized department. When all or the greater part of the companies are taken out of the village limits to give outside aid, a new condition is created—one that the rating organization did not believe would develop.

Where conditions are extremely bad, and no attempt is made to right conditions, threats have been made that policies covering local property would be cancelled if the village is frequently stripped of its fire department.

The following letter was sent by the Idaho Surveying and Rating Bureau to Jerome, Ida., when it was learned that it was the practice to send fire companies outside the defined municipal limits:

> *Gentlemen*:
>
> I am informed that recently when a fire occurred something over a mile outside of Jerome, your entire Fire Department, with all equipment, responded and was absent from Jerome two or three hours during the time of a violent wind storm.
>
> We cannot but admire and would like to encourage the spirit which prompted the department in responding to an outside call. But however that may be, the fire insurance grading of Jerome is predicated on there being a Fire Department with suitable equipment available in Jerome at all times, and I would submit for your earnest consideration that if your Fire Department is to take essential equipment to outside fires, your town should make provision for additional equipment and men ready for service when the other part of the equipment and men respond to outside calls.
>
> Respectfully,
> J. H. Branscomb, Manager.

In order that a large department may be of service to its neighboring community, or so that a village may give aid to rural districts in time of fire, fire associations have been organized and financed.

Rural Fire Associations

The general outline of this plan is for the rural residents to organize and contribute say twenty-five dollars each towards the purchase of special apparatus for the protection of such property. An arrangement is made with the village whereby the village will house the machine, and in case of fire, will drive the apparatus, properly manned to the scene of the fire, and will try to extinguish the flames. In return, the village has the right to use the apparatus as a standby unit for fires within the village. The share-holders or the contributors to the purchase of the special apparatus, are not assessed or called upon to pay another cent during the normal life of the apparatus. Should the machine be badly damaged and it is necessary to raise funds for the purchase of another one, all the contracts made become null and void, and it is necessary to contribute to the purchase of a new machine, if fire protection is desired.

Sometimes a clause is added that fire protection will be furnished to rural property owners who are non-subscribers under certain established rates—so much for the use of the apparatus for the first hour at the fire, and an extra charge for each additional hour or fraction of an hour that the apparatus is used at this fire.

An interesting contract has been drafted by officials of Pitsburg, Ohio, so that rural residents may enjoy the corporate benefits of fire protection. The contract in full follows:

> Whereas, the village council of Pitsburg, Ohio, passed an ordinance granting and regulating fire service outside the corporate limits and within two miles of the corporation line, and
>
> Whereas, I, the undersigned am the owner of property within the fire zone of two-mile limit and desire fire protection
>
> Therefore, I agree to pay said Village the sum of fifty dollars for each fire that the Fire Department of said village may be called to fight, also agree to pay each fireman for all time in service at the rate of one dollar per hour and for all chemicals used, the regular pay of firemen while fighting fires and the cost of all chemicals.
>
> Payment to said village shall be made within thirty days from time of fire.
>
> I further designate myself and immediate members of my family, my tenant and the immediate members of his

family and ..... and ..... either of whom are authorized to call the Fire Department in the event of any buildings catching fire and a call from either of them shall be as binding on me as if I had made the call myself.

The Fire Department will respond to all calls made as above provided, providing the said department is not engaged at the time in fighting fires in said village or has a call to a fire to said village.

Provided further should the Fire Department respond to a call as above provided and receive notice from the village officials that it is necessary for said firemen to return to said village to fight a fire within the village, the Fire Department shall return to said village forthwith and should the fire be not extinguished on the premises of the above party before leaving or so as not to give the property owner the proper assistance the property owner may require then, and in that event, the village shall receive no compensation for making the run or for services rendered.

It is further agreed that the Fire Department shall render all the assistance they can. The Fire Chief and his assistants shall be the sole judges of and direct the operation of the Fire Department in fighting fires.

The property owner or his tenant shall not interfere in any manner with the firemen.

It is further agreed that this contract shall continue indefinitely and until terminated by either party giving notice in writing to the other party that the contract is terminated.

Witness our hands in duplicates this ..... day of ..... Village of Pitsburg.

.....
Property Owner

By .....

This contract is an interesting one and is not presented with the idea that it is a model one.

Town Must Provide Service

When a property owner subscribes to a service he should have some guarantee that he will enjoy the benefits of that service, should the time come when it will be needed. Should there be a fire in the village at the time some rural property catches on fire, the latter property owner should have some definite description of minimum service. He should be entitled to the services of say six men, in such an emergency, and in case special apparatus is not purchased for rural protection, he should be entitled to the use of an old chemical car or some apparatus that the village may have in reserve.

Should the improbable but not impossible condition arise when fire breaks out in the village and on the property of two rural subscribers, then the Chief of the Fire Department shall determine to which of the rural properties the reserve apparatus and the six men shall respond.

It is a gross injustice for a village to permit property owners to contract for a fire service whereby the property owner makes himself liable for certain fees, and then to include a clause which permits the village Fire Department to cancel the contract for the time being, should the village be in a position where it is not possible to give service. After all, fire is an emergency, and the subscriber would be placed in a very peculiar position if he had to rush around for aid at the last moment.

A suggested resolution has been drafted by the League of Minnesota Municipalities to cover the case where residents of outside territory are negotiating with a village for fire protection. The suggested resolution which they drafted follows:

Resolution Regulating Sending Fire Equipment Outside Municipal Limits

Whereas the city (village) of ..... desires to aid in preserving property from fire in surrounding territory, and

Whereas Chapter 232, Laws 1929, authorized municipalities to send their Fire Departments or any portion thereof outside of their limits and to enter into agreements for compensation therefor and

Whereas the ..... council hereby fixes the rates to be charged for such service as follows:

Rental of fire truck.....per call
Services of firemen.....first hour
Services of firemen.....per subsequent hour

Therefore, be it resolved that when any property owner or owners, association of owners, insurance company or society, or political subdivision shall ask the municipality by a written statement filed with the recorder to aid thereafter in fighting fires on property owned, leased or represented by such person, persons, or organizations, and shall agree to pay for such services at the rates herein fixed, the recorder shall inform the Chief of the Fire Department of such agreement, and thereafter the department shall respond to calls or alarms from such property or properties. Provided, that in no case will the village be bound to send apparatus outside when in the discretion of the Chief it is needed for local service.

Be it further resolved, that when any service hereunder has been rendered, the Chief of the Department shall immediately thereafter make a record of the time and place, the apparatus used, and the number of men responding to the alarm and time each served, and shall notify the city (village) clerk (recorder) thereof. The clerk (recorder) shall thereafter bill the responsible party or parties for the amount of such services; provided that when a bill remains unpaid for a period of ninety days and no satisfactory settlement is made thereon, the recorder shall notify the Chief of the Department, who shall forthwith remove such name and property from the list to be served, and no further service shall be rendered thereto or thereon until reinstated by such payment and further agreement.

In addition to contracts whereby a village may furnish fire protection service to an individual residing outside of the defined village or corporate limits, laws have been enacted whereby cities, villages or towns may by ordinance permit the local department to go to the aid of another city, village or fire district. New York State has amended Chapter 332, Section 209 of its laws as follows:

Section 209. Outside Service by Local Fire Departments and Companies.

1. Cities, villages, towns and/or fire districts may adopt an ordinance or ordinances authorizing and permitting their respective Fire Departments or fire companies to go to aid another city, village, town or fire district, or territory outside of a city, village or fire district in extinguishing a fire or fires therein, and while in the performance of their duties in extending such aid, the members of such departments shall have the same immunities and privileges as if performing the same within their respective cities, villages, towns or fire districts. Any such ordinance may authorize the head of the Fire Department to extend such aid, subject to such conditions and restrictions as may be prescribed therein.

2. Any loss or damage to the fire apparatus of the city, village, town or fire district answering such call shall be a charge against and paid by the city, village, fire district or territory outside any such district, so issuing the call for assistance and in which the fire occurred. No such claim, however, shall be allowed unless within sixty days after such loss or damage has been

(*Continued on page 626*)

—Photo by Ewing Galloway

Rushing Out to Aid a Rural Fire Association Member

THE ROUND TABLE

For Practical Discussion of Current Fire Department and Fire Management Problems

MANY different lengths of ladders are available for Fire Department use, each designed to permit easy and quick access to upper floors. They range in length from the single twelve-foot ladder that is carried on city service trucks to the fifty-five-foot extension ladder. For greater heights there is the aerial ladder that is part of a turntable arrangement on special fire apparatus.

Ladders that are made for fire service must be exceptionally well constructed. Each rung must be designed to support the weight of several persons and the ladder, as a whole, should stand up well when several men are on it.

Sometimes a defect will develop when an excessive load has been placed upon some part of the ladder. To make such defects more noticeable, ladders are never painted but are given a good coat of high grade spar varnish.

It has been difficult to determine the life of ladders, for unless they are scorched by flames, the ladders will last for many, many years.

Many of the larger departments arrange for frequent ladder inspection. When anything is found that demands prompt attention, the repairs are made at once.

In the box on this page is the question that is treated in this issue. In the box on the following page is the problem that will be discussed in the next issue. Should you have some comments that you would like to add to the next discussion, you are invited to write to the "Round Table Editor," FIRE ENGINEERING, 24 W. 40th Street, New York, N. Y. There is no charge for this means of solving your fire problems.

HERE IS THE PROBLEM

What size ladders do you use in your department?

What size ladders have you found to be most useful for average Fire Department work?

What have you found to be the life of your ladders?

Discussion of the Question

It has been difficult, indeed, for chiefs to single out some particular size ladder as being the most useful in the department. However, many have found the thirty and thirty-five-foot extension ladders to be the ones most commonly placed in service at a fire. The replies received follow:

Thomas J. McCarrick, Chief, Revere, Mass.: The ladders used in our department are of the following lengths and types: 20, 25, 28, and 30-foot straight ladders; 12, 14, 16, 18, and 20-foot roof ladders; 10 and 12-foot folding ladders; 20, 24, 35, 45, 50 and 55-foot extension ladders; 65-foot aerial ladder and two pompier ladders. This is the ladder equipment carried on ladder trucks. The ladder equipment carried on the engine and combination companies consists of one 12-foot roof lader; one 24-foot extension ladder and one 10-foot folding ladder.

The use of 25, 30, and 35-foot wall ladders; 20-foot roof ladder and 10-foot folding ladder seems to predominate all others in actual fire service. The 10-foot folding ladder is always used whenever the fire has entered the partitions of a building. Our aerial truck covers all boxes wherein the higher buildings are located, therefore the use of the 65-foot aerial ladder supplants the use of the 45 and 55-foot ladders, whenever practical.

It seems to me that the life of fire ladders depends almost entirely upon service and care. Our company officers are required to inspect ladders daily and if repairs are needed the matter receives immediate attention. At least once a year all ladders are rubbed down smooth and refinished, new ropes are provided about every three years. I believe that a good ladder, well cared for, may be continued in service during the life of the apparatus, in such cities wherein from 6,000 to 7,000 feet of ladders are raised annually. We have had ladders that have outlived the apparatus and are now being used by our Public Works Department. All ladders in this department are of the truss type.

E. Ricker, Chief, Biddeford, Me.: The size ladders used in our department are as follows: 75-foot aerial; 50, 40, and 35-foot extensions; 25 and 30-foot wall ladders; 20, 16, 15 and 12-foot roof ladders; 25-foot extension and 36-foot triple extension; 24-foot extension roof; 10-foot collapsible, and 12-foot scaling ladders.

I think the most useful ladders for the average Fire Department work are the aerial, the 35-foot extension, the 40-foot extension, the 25-foot wall ladder and the 20-foot roof ladder.

With the proper care and attention, the life of ladders should be about sixteen years.

James Welsh, Chief, Eau Claire, Wis.: We use 50, 40, 35, 24, and 20-foot extensions; 30, 25, 20, and 16-foot wall ladders; 12, 16, and 20-foot roof ladders and pompiers.

The 30, 25, 20, and 16-foot wall and the 24-foot extensions receive the greater service.

A skilled wood worker in our department shop maintains all ladders in good condition, repairing all breaks from well selected stock which makes it rather difficult to determine the length of life of ladder; however, I would say fifteen years for the ladders most commonly used in the fire service.

J. C. Hagerty, Chief, Watsonville, Cal.: We have a city service truck containing: One 16-foot extension; one 55-foot extension; one 45-foot extension; one 35-foot extension; one 30 and one 25-foot wall ladder, one 20 and one 16-foot roof ladder: one 16-foot pompier; two 12-foot pompier ladders and one 9-foot folding attic ladder. On our pumpers we have 20-foot extension and 12-foot roof ladders.

The size ladder in our opinion which is best, is the extension ladder, as it fits the job especially when going into windows. Of course one has to realize that each ladder was built for a need and judgment must be used in their selection.

The life of the ladders will have to be assumed. On returning from a call the ladders are cleaned and dried immediately and are inspected daily. They are also kept out of the sun when not in use and farthest away from

the furnace in winter. We estimate, therefore, the life of our ladders at twenty years.

Giles Dow, Chief, Stoughton, Wis.: Each one of our three trucks carries a twenty-four foot extension ladder and a twelve-foot roof ladder and we carry a twelve-foot folding ladder on both pumpers. We have a forty-foot and a thirty-five-foot extension ladder in reserve although these have not been used for several years. Most of our buildings are low, only two of them being three stories high so we usually use the twenty-four-foot extension and the twelve-foot roof ladders.

I cannot give you an estimate of the average life of a ladder in fire service. The two long ladders mentioned are about thirty-five years old and stood up under severe test about a year ago.

E. W. Gieselman, Chief, Syracuse, N. Y.: Our ladders range from 85 to 14 feet. We have found the following arrangement in the use of ladders best: 24 and 30-foot in downtown districts, and 24 and 20-foot ladders in outlying districts. These ladders are used on account of being so handy in removing from truck, being on the side of the apparatus.

With the attention given by the officers and members of the various companies and also the department carpenter we have found the life of the ladders is indefinite. All ladders in our department are the trussed type.

J. Grignon, Chief, Bartonsville, Vt.: We use ladders ranging in size from 65 down to 12 feet.

The 30 and 35-foot triple extensions are used the most in our department, because we carry one on each truck.

I have been using these ladders for years and they do not show much signs of hard usage. I don't, therefore, really know how long a ladder should last.

H. J. Becker, Chief, So. Orange, N. J.: We use the 10-foot folding; 15-foot roof ladder with hooks; 20, 25, and 28-foot single and the 40 and 55-foot extension ladders in our department.

The most commonly used ladders are the 10-foot folding, the 15-foot roof with folding hooks, and the 20, 25 and 28-foot single, and 40-foot extension.

With reasonable care, ladders will last for 15 to 20 years.

Frank Clark, Chief, Belvidere, Ill.: The ladders we use and find most useful are the 34 to 20-foot extension ladder and the 20, 15, and 10-foot roof ladders.

From about twelve to fifteen years is the life of the average ladder.

R. B. Pinder, Chief, Key West, Fla.: The size ladders we use runs from ten to fifty feet. We find that the ten-foot ladders and the 24-foot ladder are most essential for our Fire Department work.

The life of ladders depends on the care they receive. I believe that after all fires where ladders are used, the ladders should be carefully inspected. I believe with this careful attention they will last the life of the truck, unless, of course, they are broken by accident from a fall.

John A. Grogg, Chief, Tiffin, Ohio: In our department we use one 55-foot extension ladder; one 40-foot extension ladder; two 30-foot, one 25-foot, one 20-foot, one 12-foot, one 14-foot and one 12-foot roof ladder.

I have found that all the ladders listed above are very useful in our department and do not know how any department can get along without them.

I have some ladders in use that are forty years old and are in good condition. But ladders should not be used after twenty-five years of service.

Thomas A. Qualey, Chief, Medford, Mass.: We use in our department ladders from 11-foot folding to 60-foot extension, and a 75-foot aerial ladder.

The ladders used the most are the 30 and 35-foot extension ladders. The life of a ladder in this department is beyond my comprehension as I have been chief only since 1918 and have not had to replace any ladder. I do not remember the Chief before me replacing any that was worn out in the service. The only replacement would be ladders broken or ones burnt at fires.

Otto B. Johannes, Chief, Columbus, Nebr.: We use 20, 28, 32 and 50-foot ladders in our department. The ones used the most are the 20, 28 and 32-foot ladders.

We have replaced but one ladder in 30 years. The life of a good ladder depends on the care it is given and whether or not it is used.

H. H. Wardleigh, Chief, Ogden, Utah: We have aerial 65-foot American-LaFrance ladders but are handicapped by networks of overhead wires, so we use the 40-foot and 24-foot extensions most of the time. The pompiers come next in line for common use. Ladders will last indefinitely if properly cared for.

J. J. Kuplic, Chief, Manitowoc, Wis.: In our department we use ladders of the following sizes: 12, 18, 40, and 50-foot extension ladders; two 25-foot, one 20-foot, one 25-foot, and one 28-foot ladders; one 12 and one 16-foot roof ladders.

We found the 12-foot extension, and the 40-foot extension, the 16-foot roof and the two 25-foot ladders the most useful for our department.

I really cannot state just what the life of a ladder is for in our department we have some in good condition after twenty-two years of service.

Paul E. Dolan, Chief, Cedar Rapids, Iowa: We use 14, 18, 20, 25, 35, 45 and 50-foot ladders in our department.

The most useful for average Fire Department work is the 18, 20, 25 and 35-foot ladders, and 14 and 20-foot roof ladders.

The life of a ladder depends considerably on the amount of wear and tear they are subjected to. Ladders kept properly, varnished every year with good spar varnish wear longer. If the rungs are kept tight and the ladder properly treated, they will last twenty years or longer.

V. S. Whitesides, Chief, Tupelo, Miss.: We use 12 and 16-foot hook ladders, and 28 and 35-foot extension ladders in our department. The most commonly used ones are the 16-foot hook ladder and the 28-foot extension.

Our ladders are from two to six years old and are still very good.

John J. Waltz, Chief, Easthampton, Mass.: In our department we use 25, 35, 40, 50 and 60-foot ladders.

The 35-foot extension ladder is the most useful for the average fire department.

Our present ladders are of truss type and they are fifteen years old, and in good condition.

J. H. Gillis, Uxbridge, Mass.: We use ladders up to 55-foot in length. The most commonly used one and the one most useful is the 28-foot ladder.

We have some ladders twenty years.

Elmer Keith, Chief, Corsicana, Tex.: We use the 12 to 50-foot ladders a great deal in this department and find them satisfactory where there are enough tall buildings.

B. A. Howard, Chief, Kirksville, Mo.: We use 8, 12, 20, 40 and 50-foot ladders in this department. The most useful ladders are the 20 and 8-foot ones. Ten years is the life of an average ladder.

J. C. Pierce, Chief, Woodstock, Ill.: The ladders we use and find most useful in our departments are the 6, 12 and 32-foot ladders. Ours never seem to wear out. They last as long as the trucks do and sometimes longer.

Melville Haines, Chief, Hastings-on-Hudson, N. Y.: We use ladders up to a 75-foot aerial. We find the 40-foot ladder, however, the most useful. Ladders are usually good for use for about eight years.

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HERE IS THE PROBLEM FOR THE NEXT ISSUE

What type and how many portable extinguishers do you believe should be carried on a pumper? On a ladder truck?

What suggestions have you for improving the effectiveness of portable extinguishers?

Do you believe that the Fire Department should service small size extinguishers used in homes?

What experience have you had in this work?

With the Editor

Arson as a Crime and a Disease

The reasons actuating the criminal in acts of arson are many and varied. The crime may be inspired by a desire for gain or to save the person from a situation in which financial ruin is the alternative; it may find its wellsprings in a wish for revenge or in an inclination to murder; it may be the result of a strong desire for excitement, or it may even be perpetrated—as in one or two recent cases—by firemen themselves in a mistaken idea of showing their prowess in the extinguishment of fire.

But there are times when arson—while still a crime—becomes also an obsession. In cases of this nature often the criminal cannot tell why he pepetrated the act, and sometimes cannot even remember when it was done. A case of this kind occurred recently in the upper part of New York State. A hotel with historic associations was found to be on fire, but the blaze was confined to a single room. It was discovered that the origin was an automobile tire filled with gasoline which had been carried up to the room and ignited by the incendiary, who afterward confessed to having also previously fired the hotel, the first occasion resulting in damage of $50,000. The arsonist, on being questioned, said that he did not know why or when he had set fire to the hotel.

The most dangerous class of arsonists are those organized into a group. These criminals usually have at their head one who is a shrewd and wily leader. Recently such a gang was rounded up in the South and four men and four women received sentences ranging from nine months to four years. The activities of this ring extended into several states in the South and West, and the breaking up of the gang removed a serious menace to life and property.

A case of peculiar savagery came to notice recently. The victim had the misfortune to resemble the alleged perpetrator of the outrage closely, and was picked to enact of the role of proxy without, of course, being aware of the fact. He was lured to the house of the individual, whose life, of course, was heavily insured, drugged, and left to die miserably in the flames, while the real subject of the policy disappeared. However, by good fortune, the drug or liquor which stupefied the victim was not potent enough to render him unconscious to the pain of his burns, and he staggered from a window of the burning residence into a nearby garage, clad only in shirt and his body covered with burns.

An investigation by the Fire Marshal disclosed streamers of kerosene soaked rags leading from room to room of the house from which the intended victim had escaped and coats and blankets fastened over the windows, evidently with the intention of allowing the fire to obtain headway before being discovered from the outside. The perpetrator of the outrage disappeared.

These various incidents, picked at random from the news, tend to show strikingly how versatile is the arsonist and how serious a problem he constitutes for the Fire Chief.

Planes in Forest Fire Work

The airplane has taken its definite place in the fighting of forest fires in the twenty national forest reservations in the Northwest. In order to cut time and space in fighting fires in these forest areas, fourteen powerful tri-motored planes have been placed at the disposal of the forestry department and hours instead of days of strenuous travel to reach the seat of the fire are the result.

This has been made possible through the construction of extensive emergency landing fields in various positions that are strategically situated, and which will enable the planes to reach the center of the blazes with comparative ease. Previously, only small planes had carried supplies and fire-fighting equipment to the base camps, which were furnished with small landing fields. The larger fields have been constructed in Montana, Idaho and Washington, thus enabling the machines to cover an extensive territory and enabling them to be rushed to new blazes in a few hours.

Owing to the general drought and lack of rain in the Western forests, they are so dry that small fires are fanned into conflagrations in a few hours and it requires hundreds of men to combat such big fires. Whereas, if men can be landed on the spot of a small blaze, shortly after its inception, and before it can attain huge proportions, trenching operations by a few fire fighters will effectually bring the fire under control.

The preserving of these large tracts of valuable timberland from their worst enemy—fire—will many times compensate the government for the expense incident to the employment of these larger planes in this service. The assignment of them to this service is, therefore, a wise move and one that should be fruitful of good results.

Police Ask Firemen For Help

The fireman is asked to perform all sorts of odd jobs outside his professional labors, but it isn't often that he is requested by the police for help in subduing a recalcitrant prisoner. This happened recently in a large Eastern city.

It seems that a big and husky janitor resented the action of a passing citizen, who protested vigorously when the caretaker had liberally sprinkled his wife as

well as the sidewalk. In the battle which followed the citizen and a friend who had come to his assistance suffered the ripping of their coats and sundry other damage ignominiously retreating. The arrest of the janitor for assault followed, and he was taken, apparently peacefully, by the majesty of the law in a commandeered automobile to the police station.

However, before reaching his destination, the janitor seemed to have changed his mind and decided thereupon that he would not go to the police station. In the melee with the police officer, a window of the car was smashed and when the station was reached the problem of removing the big fellow from the car against his will presented itself. Several of the fellow officers in the station came to their comrade's assistance, but to no avail, and then at this point the Fire Department triumphantly entered the scene.

Finding they could not prevail against the huge janitor, the police called for volunteers from the adjoining fire station, and a husky squad of fire fighters responded. After this it was only a matter of minutes when the reluctant prisoner was languishing in a cell.

Thus another extra duty, far from their legitimate pursuits, was successfully credited to the Fire Department. Ready at all times to answer calls for assistance when flames menace the citizens' lives or property, these guardians of the people also are willing cheerfully to help when any other emergency arises, no matter how serious or how trivial. And when they undertake any such task it is pretty sure to be well done!

Train Trip to Havana Convention

While the "President's Special," as announced in the last issue of FIRE ENGINEERING, has been called off, special cars will be attached to the Havana Special of the Atlantic Coast Line Railroad Company, leaving Pennsylvania Station, New York, 10:15 p.m. Sunday, October 11, to Key West to accommodate those who prefer to go by train. Arrangements may be made through the same company for steamer reservations on P. & O. Steamship leaving Key West at 12:50 p.m. Tuesday, October 13, and arriving at Havana 6:50 p.m. the same day.

The same rail and pullman rates previously announced for the "President's Special" will apply to this train. The cost for railroad transportation round trip, will be one and one-tenth times one-way fare. This is the lowest rate which has ever been made available to members of the Association attending a convention.

Further information on the Havana Special may be secured from B. F. Fuller, Asst. General Passenger Agent, Atlantic Coast Line Railroad Co., 8 West 40th Street, New York City.

Campbell, O., to Receive New Apparatus—The purchase of new fire apparatus costing $15,000 has been approved by the city council of Campbell, Ohio.

Cheyenne, Wyo., to Erect Fire Station—Contracts have been awarded for the construction of a fire station in Cheyenne, Wyo., to cost $42,500.

Eastport, N. Y., to Buy a Pumper—Eastport, N. Y., is considering the purchase of a 500-gallon pumper. The sale is to be financed by the sale of bonds.

Scranton, Pa., May Buy New Apparatus—Chief Edmund B. Lewis of Scranton, Pa., has requested that two new pieces of apparatus be purchased to replace two units now in service.

Chevy Chase, Md., to Have New House—Work has been started on a new fire station for Chevy Chase, Md. The contract states that the work must be completed within 120 working days.

Rules to End Accidents

According to a special order issued to members of the New York Fire Department by John Davin, Acting Chief of Department, the following rules were given to prevent accidents to apparatus while responding to or returning from a fire:

1. Keep the apparatus always under control.
2. In the absence of traffic policemen, when approaching street crossings, against traffic lights, use every precaution.
3. Drive through a one-way street against traffic in responding to fires only when it is impossible to avoid it, but never when returning from fires.
4. Avoid streets where there are elevated railroad columns whenever possible.
5. A company must proceed with extreme caution when it has been delayed in leaving quarters in response to an alarm of fire, or while enroute thereto, or if for any reason the normal route to a station is changed, due to street repairs, excavations, etc., as other companies responding to the same station will not expect to meet the delayed apparatus.

Chief Gordon, Newport News, Dead

Chief John B. Gordon, head of the Newport News, Va., Fire Department for the past ten years died in the Riverside Hospital at the age of fifty-four, after an illness lasting since early this summer. He was with the Fire Department for thirty-three years.

He was born in Henrico County, June 23, 1877. For the first three years of his residence in Newport News, he was employed at the plant of the Newport News Shipbuilding and Dry Dock Company.

On June 11, Chief Gordon was stricken ill with pneumonia and was confined to his home for a long period. Complications set in and it was decided that it would be far better if the Chief was removed to a hospital. While he was in the hospital, Assistant Chief Donnelly was named Acting Head of the Fire Department.

The Late Chief J. B. Gordon

Chief Gordon was married twice. A daughter by his first marriage died recently. His second wife and two grandchildren survive him.

Out of respect to the late chief, a concert by the Municipal Firemen's Band was cancelled.

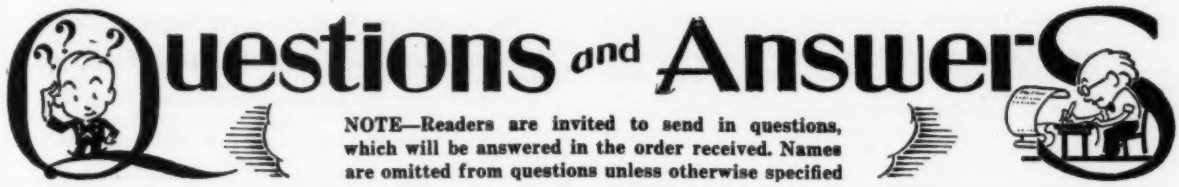
Warehouse Fire of Incendiary Origin

Three alarms were sounded for a blaze in the theatrical storehouse at 1211-1213 Columbus Avenue in the Roxbury district of Boston, Mass. The fire raged fiercely and as several empty kerosene cans were found on the premises it is believed that the origin was incendiary. Eight Boston firemen suffered injuries when a section of the roof and a rear wall collapsed.

The fire was fought from the street in front, from ladders, from the roof of an adjoining building, and from the railroad embankment in the rear.

Chief Henry A Fox was in charge, assisted by Assistant Chief Henry J. Power and Deputy Chief Thomas H. Downey. The building burned was an old structure formerly used as a car barn. The fire broke out shortly before 9 p. m. Damage was estimated at $20,000. The blaze was witnessed by a number of fire chiefs who were in Boston for the convention of the New England Association of Fire Chiefs, which was in session at the time.

HARRY BELKNAP.



NOTE—Readers are invited to send in questions, which will be answered in the order received. Names are omitted from questions unless otherwise specified

Solution of Hydraulics Problem

To the Editor:

In "Questions and Answers for Battalion and Deputy Chief," on page 139, under "Hydraulics," is a problem regarding a water tower 65 feet high operating with a 2-inch nozzle.

In the solution of the problem, on page 141, with 100 lbs. N.P. x 1.1 + 1.55 x 0.428 the answer is 176 lbs.

I find 1.1 + 1.55=2.65 x 0.428=1.1342.

1.1342 x 100=113.42 pounds. This is not the same as the answer in the book. Is it correct?

B. H.

Answer: The problem which you cite is correct as given in "Questions and Answers for Battalion and Deputy Chief."

Your error is in the method of employing the formula. K must be multiplied by L before the 1.1 is added to it. After adding the 1.1 to the product of K & L, the sum so found is multiplied by the nozzle pressure. This gives you 176 pounds as the engine pressure (176.34 pounds to be exact).

Nozzle Reaction

To the Editor:

Will you kindly answer the following question your Questions and Answers column?

If I were operating a stream of water through a play pipe, 90 pounds pressure, fastened to the top of a 75-foot aerial ladder, through an open window, the ladder being 15 feet away, and then turned the ladder so that the stream struck the brick wall, would back pressure be sufficient to tip the aerial over?

My contention is that the sudden resistance offered to the wall would build up what I would term a "back kick" pressure of about 200 pounds.

Thanking you for any information you can give me, I am,

M. J. H.

Answer: Where the stream from the pipe attached to a 75-foot aerial ladder is swung so as to strike the building, there will be no increase in reaction at the nozzle. It is possible that if the nozzle were brought up close to the building—within a few inches—there would be an increase due to the inability of the water to escape from the area in the immediate vicinity of the nozzle upon impact, but it would be necessary to bring the nozzle very close to the wall in this instance.

For all practical operations, you may consider there is no additional recoil due to a stream striking a wall over that produced by the normal reaction of the stream upon leaving the nozzle.

Drafting Water from Pipe Line

To the Editor:

I am very much interested in the answer to the question shown on page 171 of the March 4 issue of FIRE ENGINEERING entitled "Pipe Lines for Fire Protection." Will you please indicate what you mean by a "slope from source of supply to hydrant." These words appear in the last paragraph on the page.

I have found from experience, in drafting water through a pipe line over 280 feet in length with more than 10 feet of lift total, that the smallest diameter pipe that can be properly used and supply a 750-gallon engine and furnish two good fire streams is an 8" pipe. The length of the line was 300 feet on each line, the tip was 1⅛" and the engine pressure was approximately 110 lbs. I estimated that the delivery was approximately 275 gallons per minute from each tip.

We found in making this experiment that it was necessary to lower the suction end of the pipe to a distance greater than 3 feet 6 inches in order to overcome the whirlpool. We carried an 8" pipe direct to a 5" hydrant which had no gate therein.

Is there any way in which the friction loss can be determined in a suction pipe of this nature? I assume that the atmospheric pressure will always be constant, within a few ounces. Any information you can give me will be appreciated.

W. D. R.

Answer: With reference to the pipe "sloping from the source of supply to hydrant," by this is meant that the pipe carrying water from the bay or river must drop in level as it approaches the point at which the hydrant is attached. For example, if the intake end of the pipe were 8 feet below high water mark, the hydrant end of the pipe would have to be lower still than this amount in order that there would be a natural flow inland to keep the pipe filled with water at all times. If the pipe is very long, a greater slope would be desirable, for a fire engine in good condition can lift water 25 feet, if there is plenty of water available to keep it supplied. Assume that the hydrant outlet is 25 feet above the end of the pipe supplying it, and further assume that the low water level in the bay, or the river, from which the water is taken is 10 feet below the level of the hydrant outlet. Then we would have a drop of 15 feet from the source of supply to the hydrant. Fifteen feet in head would represent 5½ pounds pressure which would be the pressure available for overcoming friction loss in the pipe line. This available pressure would force the water through quite a long stretch of 6" pipe, as you will probably appreciate.

The following table gives the friction loss in cast iron water pipe of the different sizes for various flows:

Gals. per minute	Pressure loss in lbs. per 1,000 feet				
	4-in.	6-in.	8-in.	10-in.	12-in.
260	22	3	0.7		
500	76	10	2.4	0.8	0.3
1,000	..	37	9.0	3.0	1.1
1,500	..	..	18.0	6.0	2.0
2,000	..	..	32.0	10.0	4.0
2,500	..	..	48.0	16.0	6.0
3,000	..	..	..	22.0	9.0
4,000	..	..	..	38.0	15.0
5,000	..	..	..	..	24.0

Back Draughts and Hot Air Explosions

To the Editor:

I would appreciate an answer to the following questions.

(1) What is a hot air explosion, and what precaution would you take to prevent same?

(2) What is a back draft and what precaution would you take to prevent same?

G. J. E.

Answer 1. A hot air explosion may be described as follows: where a fire is burning with an insufficient supply of oxygen, combustible gases are distilled off and are not completely burned. When a building wherein a fire has been smouldering for some time is opened, and in which unburned gases are present, the inrush of fresh air supplies the necessary oxygen, and there being a source of ignition for the

gases at hand, explosion takes place. This explosion is commonly referred to as "hot air explosion."

The best precaution to take is to provide thorough ventilation of the building, opening up the top first, and at the lower points subsequently.

Answer 2. A back draft is the outward rush of air caused by a "hot air explosion." Precautions to prevent back drafts are the same as those required to prevent hot air explosions. In addition, the men operating at a building should stand to one side when the building is being opened up so that they will not be struck by the hot blast or back draft. Precautions should also be taken that men on fire escapes are not in line with shutters, for when back drafts occur they may blow the shutters outward and knock the men off the escape or otherwise seriously injure them.

West Virginia Chiefs Organize

During the meetings of the first annual West Virginia Fire School held in Morgantown, W. Va., July 27-30, the Chiefs of the state formed the West Virginia Fire Chiefs' Association with Chief Martin Quinn of Martinsburg as President. The other officers are Chief J. R. Hare, Morgantown, Vice-President, Chief E. A. McGranahan, Wheeling, Treasurer, and Chief C. J. Powell, Romney, Secretary.

Officers of the State Association

Left to right: Chiefs E. A. McGranahan, Wheeling; J. R. Hare, Morgantown; Martin Quinn, Martinsburg.

The school was a success from every point of view, according to an opinion expressed by Lewis V. Carpenter of West Virginia University, who is Director and Secretary of the Extension School. A total of 152 persons had registered.

The following papers were presented:

"The Work of the State Fire Marshal's Office," by C. O. Stahlmann, State Fire Marshal.

"Organization and Discipline in Fire Departments," by Harry K. Rogers, Western Actuarial Bureau, Chicago.

"Hydraulics, Fire Streams and Demonstrations," by William A. Rathbun, National Board of Fire Underwriters, Chicago.

Pumper Test Class at the West Virginia Fire School

"Chemistry of Fire—Lectures and Demonstrations," by W. W. Hodge, Professor of Chemical Engineering, W. Va. University, and Prof. Samuel Morris, Professor of Chemistry.

"Electrical Fire Hazards," by Prof. A. A. Hall, Professor of Electrical Engineering, West Virginia University.

"Building Codes and Fire Prevention," by E. V. King, State Superintendent, West Virginia Inspection Bureau, Charleston, W. Va.

"Fire Department Inspection and Records," by Carlisle A. Raper, Assistant Fire Marshal.

"Cellar Nozzles and Distributors," by Chief Martin Quinn, Martinsburg, W. Va.

"Chemical Fire Extinguishers," by Nelson Bauer, Pyrene Manufacturing Company, Newark, N. J.

"Demonstration of Automatic Sprinklers," by C. W. Hutchinson Huntington, W. Va.

"Pumper and Hose Tests," by W. J. Williams, Engineer, West Virginia Inspection Bureau.

Others who had parts on the program included John Roscoe Turner, President of West Virginia University; Plummer Pride, Safety Director, National Fuel Coal Co.; George Riggs, Mine Safety Appliance Company, Pittsburgh.

The school was sponsored by the West Virginia University, State Department of Mines, West Virginia Inspection Bureau, State Department of Health and Morgantown, W. Va.

Legal Status of Pension Laws

(*Continued from page* 608)

would avail the appellant nothing, because the Board decided the question of law correctly, and it would serve no useful purpose to direct the return of the case in order that the Board might again decide the same question."

Also, in State vs. Board of Trustees, 93 Wash. 468, it was shown that the Firemen's Relief and Pension Fund Law provided that the Board of Trustees of the firemen's relief fund should hear and decide all applications for relief or pensions under the law and that its decisions on such applications should be final and conclusive on the Courts. The higher Court would not inquire into the correctness of the ruling of the Board, or review its action in denying an application for permanent relief under the law.

In this case, the widow of a deceased fireman filed with the Board a claim for the sum of $1,000, payable by the terms of the law to a widow of a fireman who had served as such for two years, and who died from natural causes. Her claim was disallowed by the Board and she appealed to the Superior Court to enforce the allowance of the claim. The Court denied the application on the ground that the action of the Board thereon was final and conclusive. In the course of the opinion in that case, it was said:

"It is within the power of the Legislature, when enacting a statute creating a new right with its remedy, to vest in some board or person power to adjudicate all matters arising under the statute, and to make much adjudication final and conclusive. . . . A reading of the law convinces us that all questions concerning the administration of the law were vested in the Board; the power to determine who were entitled to the fixed sum, as well as to determine who were entitled to temporary relief or to pensions under the law."

Distinction Between Pensions and Insurance

Ordinarily, such statutes as "Workmen's Compensation Laws" are not effective with respect to municipal firemen. This is true because firemen are not considered by the Courts to be "employes."

For illustration, in the late case of City of Macon vs. Whittington, 157 S. E. 127, it was shown that a fireman sued to recover compensation under a state law which required employers to obtain insurance for its employes.

It appeared that the city was a self-insurer and had certified its pay roll to the Industrial Commission. However, the city had obtained no benefit, such as the collection of premiums.

In view of these facts the higher Court held the fireman not entitled to recover compensation, saying:

"The member of the Fire Department of the city of Macon for whose death compensation was awarded by the Industrial Commission was not an employe within the meaning of the Workmen's Compensation Act, but was a public officer of the municipality. . . . The decedent (fireman) being a public officer and not an employe, the Compensation Act was not applicable."

Tool for Fighting Forest Fires

A special tool which is a combined rake and hoe, has been developed by the Korteck Manufacturing Company to fight brush and forest fires. It consists of a long handle and a blade which has a sharp hoe edge on one side and rake tines on the other. The handle may be detached from the blade. The tool can be used for cutting in heavy brush and roots. The manufacturers claim that the rake side is very effective for hauling out brush or other matted matter after the hoe blade has cut the roots.

Apparatus Delivered to Sound Beach, Conn.—A triple combination pumper has been delivered to Sound Beach, Conn.

FIVE-STORY BUILDING DAMAGED IN GENERAL ALARM ATLANTA FIRE

Fire Companies in Command of Chief Terrell —Streets Were Crowded with Shoppers and Office Workers—Fire Spread Halted

FIRE of undetermined origin badly gutted a five-story building in the business section of Atlanta, Ga., that was occupied by a furniture company, and slightly damaged the adjoining building, in which was located the Trust Company of Georgia. The fire loss has been estimated at $100,000.

The fire was discovered on the mezzanine floor of the Horne Desk & Fixture Company at 1 p. m., when the business section was crowded with shoppers and office workers who were enjoying their luncheon hour. It was not long before the section was covered with a smoke so dense that at times it was impossible to see for more than a few feet.

The first alarm brought five fire companies, and then a general alarm was sounded which called the entire fire force of the city under command of Chief John Terrell.

Twelve lines of water were used. It was not until 2:30 p. m. that Chief Terrell considered that the fire was under control.

The offices of the Trust Company of Georgia were damaged by water that came in when heat broke the windows. Valuable papers and some of the furniture were carried out. Several boards of the Southern Bell Telephone Exchange facing on Auburn Avenue, close to the rear of the burning building, were put out of service by water. Employees of the telephone company aided the firemen by playing water from the roof of their building onto the nearby structures to prevent the spread of flames.

The Fire Department succeeded in preventing a serious conflagration, for the buildings were close together and could easily have aided the advance of the fire.

An illustration of this fire appears on the cover of this week's issue.

Ice Houses Burn at Lynn, Mass.

A general alarm was sounded in Lynn, Mass., recently, for a fire which destroyed seven large ice houses on the shore of Sluice Pond. Fifty persons living nearby prepared to vacate their premises as flying brands menaced the neighborhood. Apparatus and men from Swampscott and Peabody aided the Lynn firemen and assisted in wetting down

Firemen Fighting the Lynn Ice Houses Blaze

the roofs of dwellings in the vicinity. The fire was highly spectacular and attracted a crowd. A Lynn fireman fell from a ladder and received a sprained ankle. The Wyoma section of the city was blanketed with heavy smoke. Citizens aided the firemen by climbing onto roofs and porches with garden hose to watch for falling embers.

The blaze was discovered about noon by a motor cycle policeman, who sounded the first alarm. Deputy Chief Edward F. Welch, upon arriving at the scene, ordered additional alarms sounded. Several firemen had a narrow escape from injury when the wall of one of the ice houses fell. There were 12,000 tons of ice in storage. The owner of five of the ice houses estimated his loss at $25,000. The origin of the fire is unknown, but a rear door was found open in one of the ice houses. In all twelve roofs of cottages were ignited. A stiff breeze fanned the flames and the colmun of smoke was visible for miles.

HARRY BELKNAP.

WHAT'S BURNING

THE following list includes fires of $25,000 loss and over in the United States and Canada, for the periods designated in the headings. These figures, compiled from telegraphic reports, are based on estimates made at the time, and are subject to later investigation and consequent revision. Taken as a whole, however, they give an approximately correct view of the losses incurred. The figures represent loss in thousands of dollars.

Week Ending August 7	Loss in Thousands of Dollars
LEXINGTON, NEB.—Sheldon Lumber Yards destroyed	68
BRUNSVILLE, IOWA—Business section destroyed	45
WESTPORT, CONN.—Barn on Silver Brook Farm destroyed	28
OTISFIELD, MAINE—Lumber yard of DuPont Co. damaged	32
PELAHATCHIE, MISS.—Part of Pearl River Valley Lumber Co.'s plant destroyed	45
RICHMOND, VA.—Garage annex of Brooks Transfer Co.; bldg. of Wm. T. Hawks	28
LACLEDE, MO.—Packing and cold storage plant of Henderson Products Co.	90
RICHWOOD, W. VA.—Parsons tanning plant	45
GALEN, N. Y.—Barn occupied by still destroyed	45
FERNWOOD, PENNA.—Factory and packing plant of Quaker Products Co. destroyed	235
CALIPATRIA, CAL.—One fourth of business district destroyed	285
HENRYETTA, OKLA.—Theatre, two rooming houses and three other business establishments	68
YARMOUTH, ME.—Paper and pulp mill of Old Forest Paper Co.	45
ATLANTA, GA.—Five-story office bldg. occupied by Horne Desk & Furniture Co.	140
NANAIMO, B. C.—Mill of Extension Lumber Co. and 5,000,000 ft. lumber	90
PINEY FORK, OHIO—Tipple of Witch Tazel Mine destroyed	70
DARBY, PA.—Norbon Engineering Co. bldg. destroyed	45
NEWTON, IOWA—Three-story Lauerman dept store damaged	190
HARRISBURG, ILL.—Woolcott Milling Co. mill destroyed	90
PRINCESS ANNE, MD.—Bldg. owned by S. Kersher damaged	70
ST. JOE, ARK.—Plant of St. Joe Lime & Stone Co. destroyed	90
FT. PLAIN, N. Y.—Grant Hotel destroyed	140
BEAVER, PA.—Three business houses in Third street destroyed, a fourth damaged	25
COLUSA, CAL.—Washington Block damaged	45
DUNDAS, ONT.—St. Paul's United Church	45
PLYMOUTH, N. HAMP.—House and barn at Tobey farm	68
ROCKLAND, MASS.—Iris Bldg.	25
CAMP DEVENS, AYER, MASS.—Barracks and theatre	35

Week Ending August 14	
BIRCH GROVE, N. S.—Schoolhouse destroyed	25
LOCKHART, TEX.—Sam Joseph store destroyed	25
ANAMOSA, IOWA—Grand Theatre building destroyed	65
LOVELAND, COLO.—Kuner-Empson Canning Factory destroyed	40
CECIL, PA.—Plant of Albert Packing Co. destroyed	70
WINNIPEG, MAN.—Whse. of MacDonald Consolidated Grocers, Ltd.	45
GRANGEVILLE, IDAHO—Ten homes, barns and garages	45
NORRISTOWN, PA.—Plant of Penn Tack Co. destroyed	125
NEWARK, N. J.—Refining plant of Emil Snyder, Inc.	65
GRACEVILLE, FLA.—Planing mill and sheds of Rex Lumber Co.	100
SAN JOSE, CAL.—Plant of San Jose Meat Co. destroyed	45
ALTAVISTA, VA.—Filling station of Sinclair Refining Co.	40
IRVINGTON, N. J.—Irvington Varnish & Insulator Co. plant	80
GRAFTON, OHIO—Grafton Hotel, adj. property	35
GASPE HARBOR, QUE.—Mill of International Pulp & Paper Co.	45
SWAMPSCOTT, MASS.—Tedesco Golf & Tennis Club damaged	40
WARREN, PA.—Several tanks of United Crude Oil Refinery	40
MUNCIE, KAN.—E. R. Ford garage, adj. business property	30
NORTHBORO, MASS.—Residence of Mrs. M. Bourgeois	60
AVON, MASS.—Barn on farm of Anthony De Molles destroyed	25
TACOMA, WASH.—Whse. of Pittsburgh Plate Glass Co.	125
FENWICK, MICH.—Whse. of Fenwick Cooperative Assn., adj. property	25
OAKLAND, CAL.—Pacific Bottle Works damaged	80
RIPPLES, N. B.—Coburn Lumber Co. mill destroyed	25
ERIE, PA.—Sanitary Dairy and Wayne Brewery property	45
DANVILLE, ILL.—Six business buildings destroyed	400
HATTIESBURG, MISS.—Property of Woodruff Furniture Co.	80

Fire Station Opened in Port Washington—A new fire station for the Protection Company has been opened in Port Washington, N. Y.

Massapequa, L. I., Has Fireboat—Massapequa, L. I., N. Y., has a motor boat equipped with a pump for patrolling the water front. It is said to be the first fireboat in service on Long Island outside of Brooklyn. The volunteer firemen have donated various parts of its equipment.

New Station Opened in Braintree

The town of Braintree, Mass., has just placed in service a fine new brick Central Fire and Police Headquarters. The building is a handsome structure containing every convenience and so arranged that the police section is entirely separated from the fire section.

Chief Fred A. Tenney,
Braintree, Mass.

Chief Fred A. Tenney, of the Fire Department, has an office on the second floor with bedroom and shower bath adjoining. This floor also contains two officers' rooms, five double bedrooms, one single bedroom, one three-bed dormitory, supply closet, kitchen with sink and gas range, smoking and game room, library, and numerous closets. Two brass sliding poles lead to the apparatus floor. There is an office and room for the deputy chief.

On the ground floor in the rear at one side just back of the watch desk and stairway is the fire alarm room. In the basement are the battery room containing 150 storage battery cells and two motor generators. All the fire alarm equipment was made and installed by Louis W. Bills, of Lexington, Mass.

The building was designed by Charles G. Loring, of Boston, and built by Dacey & Tibbets. The smoking room is provided with a tile floor. There is a 60 foot brick tower for drying hose, also a drill tower.

The Police Department section contains a booking desk, Chief's office, cell block for men, cell block for women, sergeant's room, three bedrooms, juvenile lockup, matron's room, shooting range, fingerprint and photo room, first aid room, and garage for police ambulance. In the rear is a three-door garage for police cars.

The building committee was composed of Horace R. Drinkwater Chairman; Charles O. Miller, Secretary; William P. Kelley, Fred A. Tenney, Chief of the Fire Department; John J. Heaney, Chief of the Police Department; and Charles G. Loring, Architect.

The officers stationed in the house besides Chief Tenney are Deputy Chief H. T. Sears, Captain J. Leo Denehy and Lieut. Walter Hennessy. The house is situated at Union and Washington Streets, South Braintree.

The fire alarm equipment includes a 10-circuit board and 10-circuit repeater. The building was dedicated on May 28 when Edward Avery, Chairman of the Board of Selectmen of Braintree, turned the keys over to Chief Tenney and Chief Heaney.

The apparatus in the house consists of a 750-gallon Ahrens-Fox motor pumping engine, Ahrens-Fox city service hook and ladder truck, Chevrolet fire alarm truck, and Hudson coupe chief's car.

HARRY BELKNAP.

Two Views of the Braintree Fire and Police Station
Upper—Rear of the building showing the drill tower and, lower, front of the new building with the apparatus on view.

"Chiefs' Special" Guests to Sleep at Hotels

Arrangements have been made for the Chiefs and their families who travel to Havana, Cuba, to attend the coming convention of the International Association of Fire Chiefs, via the "Fire Chiefs' Special," under the management of A. R. Brown, of the American-LaFrance and Foamite Industries, Inc., to occupy hotel rooms during the stay at the convention city, rather than to sleep on the boat, as heretofore planned.

Mr. Brown, in referring to the change of plans, said:

"The Convention Hosts at Havana have arranged an extensive program of entertainment for their guests during the convention of the International Association of Fire Chiefs. They feel that their plans can be more conveniently carried out and their guests will be more comfortably situated by occupying hotel accommodations rather than remaining on the boat. We desire to cooperate to the utmost and we now feel courtesy demands that we should occupy hotel rooms during the convention. To help offset the additional expense involved, there will be a reduction of $10 per person from the rate quoted in our letter of May 16, making the net cost for the boat trip $10 less than was formerly quoted.

"This situation could not have been anticipated at the time of making the original plans and we regret any possible inconvenience that this change in plan may cause, but sincerely believe that the alteration will be to the advantage of those taking the trip in many ways. We have hotel reservations at the Plaza and the Sevilla-Biltmore Hotels at the rate of $4 for single rooms with bath and $7 for double rooms with bath, both rates being on the European plan. The 'Fire Chiefs' Special' will be officially welcomed by the Havana officials and all the special courtesies accorded."

Fire Houses Completed in Beaumont, Tex.—Three fire stations have been completed in Beaumont, Tex.

Pumper Tested in Tarentum, Pa.—A 1,000-gallon Ahrens-Fox pumper delivered to Tarentum, Pa., has successfully passed the Underwriters' tests.

Racine, Wis., Asks for More Equipment—Firemen of Racine, Wis., have asked for more first aid equipment for resuscitation and emergency service.

Beaver Dam, Wis., Adds More Paid Drivers—The Council of Beaver Dam, Wis., approved a measure to employ two additional paid drivers for the fire apparatus.

Protest Ruling for Detector Valves—The Chamber of Commerce of Lockport, N. Y., protested a Council ruling that detector check valves be installed on all industrial fire protection sprinkler systems. It argued that such an installation would cost from $300 to $800 and that they should not be penalized for the misdoings of thirty-four users who a short time ago were found to be stealing water from unmetered sprinkler systems.

THE COVER ILLUSTRATION

An alarm of fire from the congested business district of a city often means hard and strenuous work for the Fire Department. The blaze illustration on the cover of this week's issue of FIRE ENGINEERING and described on page 617, was no exception to this rule. It occurred in the high value section of Atlanta, Ga., and caused a general alarm to be sounded before it was under control. The immense amount of acrid smoke shows that very inflammable and highly varnished wood is feeding the flames which destroyed a valuable stock of furniture and gutted the building of origin.

The offices of a nearby trust company were slightly damaged. The Atlanta Fire Department, however, by good work, prevented more serious harm being done to the closely built structures in the neighborhood.

NEW YORK PUTS TEETH IN ITS MOTION PICTURE FILM LAW

New Ordinance Result of Conference by Best Minds in Fire Department, Underwriters and the Motion Picture Industry—Text of Law

By WM. JEROME DALY

(Continued from last issue)

FOLLOWING is the second installment reproducing the text of the New York City ordinance intended to "put teeth" into the laws relative to inflammable motion picture film. The new law represents the composite thought of the "best minds" in the fire fighting service, the insurance underwriters, the fire prevention field and the motion picture representatives themselves. It is the culmination of eighteen months of sincere, earnest, painstaking and technical efforts to get the safest regulations possible for both the industry and the public.

The title of the new law is as follows:

AN ORDINANCE to amend chapter 10 of the Code of Ordinances by adding a new article 20, in relation to inflammable motion picture film, and repealing the present article 20 of chapter 10, and subdivision 23 of section 1 of article 1 of chapter 10, relating to the same subject.

Be it Ordained, by the Board of Aldermen of The City of New York, as follows:

Section 1. Article 20 of chapter 10 of the Code of Ordinances is hereby repealed and a new article 20 is inserted in place thereof to read as follows:

Article 20

(Sections 240 to 242 have already been published.—EDITOR.)

§243. General provisions applying to all buildings.

1. Construction. (a) All rooms in which inflammable motion picture film is handled or stored shall be separated from each other and from other parts of the building by partitions constructed as specified for partitions in buildings of fireproof construction in the building code, chapter 5, article 17, section 355, of the Code of Ordinances, except that partitions employing metal, wood or glass are prohibited.

(b) Every room in which film is handled and in which over two people work shall have two or more exits remote from each other.

(c) Every room containing over 100,000 feet of film and in which film was not handled or stored on the date whereupon this article shall become effective shall be provided with vents which will open automatically in case of fire. These shall be of ample size and may be in the form of automatic skylights or automatic opening window sash.

2. Fittings. (a) In every room where inflammable motion picture films are repaired or pieced together, used, handled or stored, all furniture and fittings shall be of metal or other fireproof material, except that chair seats and table and floor coverings may be of slow burning material.

(b) Joining, assembling and inspection tables shall be at least four inches distant from any radiator or heating apparatus.

3. Number of persons permitted in a room. In all rooms, except motion picture studios, in which films are handled the ratio of square feet of floor area to number of persons shall not be less than 35 square feet per person. Except as hereinafter provided for, not more than 15 persons shall work in one room at the same time.

4. Film in containers. All film not actually being worked upon or going through some operation shall be kept in closed containers.

5. Receptacles for waste. Clippings and short lengths shall be kept under water in standard metal waste cans from which they shall be removed at least twice daily. No other waste or rubbish shall be kept in these waste cans. They shall be removed to a room used for no other purpose and placed in steel drums with tight fitting covers and containing sufficient water so that the film will be entirely immersed in same. Not more than ten barrels of scrap film shall be kept in the building. Junk film in full or part reels shall be kept in closed receptacles and removed to a vault. Film shall not be baled or burned within the building.

6. Storage of cements. No collodion, amyl acetate or other similar inflammable cement or liquid in quantities greater than one quart shall be kept in a room where inflammable motion picture films are stored or repaired.

7. Fire extinguishing appliances. Premises wherein inflammable motion picture films are stored, repaired or examined shall be equipped with a number of sand and water buckets and fire extinguishers satisfactory to the fire commissioner. Each room, other than a vault, in which film is handled or stored, shall be equipped with at least one approved two and one-half gallon chemical extinguisher and one pail of water.

8. Heating. Artificial heating in any building or room other than a vault or cabinet, in which inflammable motion picture film is used, handled or stored, shall be restricted to steam not exceeding ten pounds pressure or hot water, provided, however, that this shall not be construed as prohibiting the installation of an indirect system employing high pressure steam when the radiators or heating coils of such system are not located in the room or rooms to be heated. Heat generating apparatus must be in a separate room. All steam pipes within six feet of the floor, and where passing through partitions or racks or near woodwork, shall be covered with approved pipe covering. All radiators, heating coils, pipes and returns that are near the floor or are so located as to permit any combustible material, waste or dirt to come in contact therewith shall be guarded and protected by means of one-quarter inch mesh galvanized steel wire cloth No. 20 B. & S. gauge, or by its equivalent, approved by fire commissioner. The bottoms of such guards shall be arranged so as to lift up for cleaning purposes and the tops to slope so that guards cannot be used as shelves.

9. Projecting machines. Not more than five projecting machines shall be located in one room.

10. Cleaning, polishing and buffing. Cleaning, polishing and buffing machines shall not be located in rooms with other operations.

11. Soldering. Soldering of cases when done in the building shall be conducted in a room used for no other purposes. Walls shall be constructed of six-inch hollow tile plastered each side to a thickness of one-quarter inch or by its equivalent. Area of room shall not exceed sixty square feet. Opening to room shall not be from another film handling room; it shall be protected by a self-closing fire door. Automatic vent shall be provided with a ratio of seventy square inches for each five hundred pounds of film. Room shall be equipped with automatic sprinklers with a ratio of one sprinkler for each fifteen square feet with proper sheet metal baffles. Quantity of film in room shall not exceed one case.

12. Spraying. Spraying film with an inflammable liquid shall be done in a room containing no other process and with an exhaust fan of sufficient capacity to remove all vapors as formed. Not over five gallons of inflammable liquid in approved containers shall be kept in this room.

13. Silver reclaiming from film. Silver reclaiming from film shall not be conducted in the laboratory building unless in a section cut off by a standard fire wall. Film before and after processing shall be kept in containers, in vaults. Removal of film from spools and processing shall be in a room entirely cut off from vault area.

14. Vaults. (a) Vaults must be constructed in accordance with plans submitted to and approved by the Fire Commissioner.

(b) Vaults shall not exceed 750 cubic feet in inside dimensions.

(c) Walls and floor shall be constructed of not less than 8 inches of brick, 6 inches of reinforced concrete or of 12 inches of hollow tile plastered on both sides to a thickness of at least one-quarter inch; they shall be without cracks or holes permitting escape of gases of combustion into the building.

(d) The roof shall be a reinforced concrete roof at least 6 inches thick; where the floor above or the roof of the building is equivalent to this, it may serve as the vault roof, and a heavy metal screen or its equivalent may be installed below the required roof to limit the interior vault space to 750 cubic feet.

(To be continued)

An Automatic Extinguisher

An automatic fire extinguisher that is mounted on a wall and operates by the heat of a fire in a manner similar to a fused sprinkler head, is being marketed under the name of "Firex."

The device consists of an hermetically sealed glass container mounted on a wall bracket. Beneath the bracket is a fuse arrangement and a hammer. In case of fire, the fuse melts, and the hammer is forced against the bottle. The blow will break the bottle and at the same time will set off a cartridge in the hammer head to attract attention of persons in the building. The bottle contains carbon tetrachloride so that the room becomes filled with a gas to smother the fire.

The Round Table

(*Continued from page 612*)

C. E. Swanson, Chief, Everett, Wash.: We use 12 to 45-foot ladders and a 75-foot aerial ladder in our department. We use the 35-foot extension ladder most. I believe the life of ladders is fifteen years.

Wm. J. Johnstone, Chief, Marquette, Mich.: We use ladders ranging from 10 to 65 feet in our department. We have found the 40-foot extension ladder to be the most useful. Twenty years is approximately the life of ladders.

Michael J. Corrigan, Chief, Chicago, Ill.: The size and type of ladders used in our department are: 8, 10, 12, 14 and 16-foot roof ladders; 20, 26, 30, and 36-foot wall ladders; 50 an 65-foot Bangor or extension ladders and 76, 75, and 85-foot aerial ladders.

My experience prompts me to say that the 8, 10, and 12-foot roof ladders, the 26 and 36-foot wall ladders, and the 50-foot Bangor ladder are the most useful in the fire service.

Our Superintendent of the Repair Shops states that the average life of the smaller type of ladder is four years and the larger size ladders possibly six or seven years.

* * *

ANSWERS TO PREVIOUS QUESTIONS

The following are in answer to a question on the design of fire stations and whether or not it is wise to combine the fire station with the police or other departments. If the station is also rented to organizations for recreational purposes, who should receive the rental fees?

C. W. Bowker, Chief, So. Paris, Me.: When building a fire station there should be no rooms on the first floor except for the apparatus. The chief's office and men's headquarters are to be located on the second floor.

I do not favor using the fire station as a community center nor do I believe the police and the firemen should be housed in the same building inasmuch as the firemen talk over things that should not be overheard by police department men.

Any revenue received from the rental of the fire station hall should be credited to the miscellaneous account of the city or village corporation.

J. F. Volstorff, Chief, Hood River, Ore.: If I were building a new fire station I would have the equipment room, public rest rooms and repair room on the first floor and on the second floor the assembly room, sleeping quarters and kitchen.

Ben B. Beebe, Chief, Ft. Atkinson, Wis.: The first floor of a fire station should be used for the equipment only. Sleeping quarters for men, small kitchen, large room for meetings, banquet hall, dance hall (also to be used for practicing drills when it is too cold out-of-doors) should be on the second floor. The dance hall is also used for a school every Tuesday evening.

I do not favor using the fire station as a social center. I do believe, however, that the police and fire departments can be housed together very nicely.

If the hall was rented out, the city should get the fee received.

* * *

The following reply is in answer to a question concerning the use of gas masks and if only special men or the entire department is trained in the use of gas masks:

E. F. Reed, Chief, Middletown, Ohio: We have three engine companies equipped with Burrell All Service gas masks —two to each company. All men are taught to use the masks. We have no specially trained crew for rescue work. I believe masks are all right but they are far from comfortable to work in and not in all cases satisfactory. It is very difficult to get the men to have confidence in them. One cannot run around or do much laborious work and then don a gas mask and expect to be successful. A man that is to use one for an emergency should be one who has done nothing before, otherwise, I believe, his trip in the dense smoke will not be successful every time.

* * *

The following reply is in answer to a problem on pumper hose layouts:

H. G. Painter, Chief, Kent, Ohio: We all know that in a volunteer outfit, no one man hits the same job at any one fire. Therefore I train my men to handle any part of the layouts to be made, alternating them on each drill night. There are twelve men in each company, with a Captain and Lieutenant over them. We drill the First and Third Friday evenings of each month for two hours or more. Co. No. 1 on the first Friday and No. 2 on the third Friday. All officers must be present at each drill. The Chief, Assistant Chief, a Captain and Lieutenant of the Company not on drill, form the criticizing board for the evening.

The men are instructed on the following layouts:

No. I. A line of 2½" hose from the hydrant to the fire. This layout is made on every run.

No. II. A line of 2½" hose from hydrant to fire and hooked up to 2½" connector on chemical or booster line.

If the fire is small, use small lines, perhaps a small quantity of water is needed. A little water may be required to put out the fire but more than the amount carried in the chemical or booster tank.

No. III. A line of 2½" hose from hydrant to fire hooked up to inlet of pump and city pressure run through idle pumps where only one 2½" is necessary or use lead lines with 1" tip of nozzle.

No. IV. Same as No. 3 with additional lines hooked to pump and pumper put into operation.

No. V. Same as No. 3 and 4 plus a 2½" siamese cut into one line with a 1", 3-way on one side for three additional 1" lines.

This layout is fine for a fire which has gained considerable headway; 2½" lines can be used to stop the fire and 1" lines used inside to kill embers after main fire is out.

No. VI Hook up pumper direct to a pumper hydrant or pump from well, cistern or lake as the occasion calls for.

Drive truck to place of pumping and lay one line to fire. Take off plenty of hose and cut and lay second line back to place of pumper using double end connectors on this line if there is hose enough left. If not, use 2½" siamese on first line, thus saving hose and still having two lines on the fire.

The first 5 layouts are the best if you have sufficient city pressure as it puts your pumper directly in front of the burning building and saves hose.

In a country fire where little water is at hand put your reducing connector on pumper inlet, screw nozzle on this and use a 50-foot length of 1" hose for suction line (Nozzle with 1" tip). Use 1" chemical lines on fire with ¼" or ⅜" tips.

Dailey Chief of Colorado Springs

Charles R. Dailey has been appointed Chief of the Colorado Springs, Col., Fire Department to fill the vacancy caused by the retirement of Chief P. D. McCartin.

Mr. Dailey was appointed a fireman on April 8, 1905 and lieutenant on December 23, 1905. On December 13, 1909 he was advanced to Captain and then to assistant chief on August 12, 1920.

When Chief McCartin retired, he was temporarily appointed Chief. This appointment was made permanent on July 1, 1931.

Chief Charles R. Dailey

On to Alaska!

Jay W. Stevens, Secretary of the Pacific Coast Association of Fire Chiefs, has received a number of telegrams from a number of Chambers of Commerce in Alaska inviting the association to hold its 1932 convention in Anchorage. The invitations promise a great deal of entertainment.

It is believed that at the convention to be held in San Diego, Cal., there will be additional facts announced concerning the invitation to meet in Alaska.

FIRE DEPARTMENT ACTIVITIES

Miles, Ia., to Receive Apparatus—Miles, Ia., is expecting delivery of new fire apparatus.

Apparatus Delivered to Luxemburg, Wis.—A Pirsch 300-gallon pumper has been delivered to Luxemburg, Wis.

Hopkinton, Ia., May Buy Apparatus—Hopkinton, Ia., is considering the question of purchasing fire apparatus.

Apparatus Delivered to Maora, Ill.—A Boyer pumper has been delivered to Maroa, Ill.

Suit Filed to Stop Erection of Station—A suit has been filed to stop the erection of a fire station in Cheyenne, Wyo.

Kelso, Wash., to Erect New Station—Kelso, Wash., is contemplating the erection of a new fire station. The Council is favorable to the plan.

Erie, Pa., Postpones Opening of New House—The opening of the new $70,000 fire headquarters of Erie, Pa., will be delayed until October 1.

Cedar Rapids to Install Traffic Sirens—Five sirens will be installed at street intersections in Cedar Rapids, Ia., to sound when fire apparatus leaves the central fire station

Coeur D'Alene, Ida., May Buy Apparatus—Coeur D'Alene, Ida., is considering the purchase of special apparatus for the protection of rural property.

Arcadia, Cal., to Erect Fire Station—Plans are being drawn for the combined fire and police department building for Arcadia, Cal.

Lorain, O., to Buy Pumpers—The city council of Lorain, Ohio, has granted permission for the city to advertise for the purchase of two triple combination pumpers.

Elyria, O., Firemen Observe Anniversary—Members of the Elyria, Ohio, Fire Department, observed the twenty-fifth anniversary of that organization.

Perrysburg, O., to Buy Apparatus—Perrysburg Township, Ohio has invited bids for the purchase of a 500-gallon pumper.

Belleville, N. J., Needs Apparatus—According to a report issued by the Underwriters, Belleville, N. J., is in need of fire apparatus.

Sea Cliff, N. Y., to Have Fire House—Work has started on the construction of a fire headquarters in Sea Cliff, N. Y., to cost $70,000.

Apparatus Delivered to Greene, N. Y.—A ladder truck equipped with a pump and a 90-gallon booster tank, has been delivered to Greene, N. Y.

Heppner, Ore., May Organize Department—The need for a volunteer Fire Department in Heppner, Ore., was demonstrated by a recent fire.

New Hamburg, N. Y., Rejects Bids—Bids for the construction of a new fire station in New Hamburg, N. Y., were rejected for they exceeded the appropriation by $10,000.

Car Purchased for Chief Ostertag—A Dodge coupe has been purchased for the use of Chief Frank Ostertag of Burlington, Ia.

Jersey Shore, Pa., to Buy Pumper—The Borough Council of Jersey Shore, Pa., voted to purchase a new pumper and to erect a fire station.

Jerome, Ida., Apparatus Must Not Leave Town—A letter has been received from the Idaho Surveying and Rating Bureau, advising Jerome, Ida., against the practice of local apparatus responding to fires outside of the town limits.

Dinner Given to Honor Retiring Chief—A large number of friends and firemen arranged a testimonial dinner to honor Ralph S. Young who has retired as Fire Chief of Somerville, N. J., after serving for three years.

South Bend, Ind., Wants New Pumper—The purchase of a 750-gallon pumper for South Bend, Ind., must await such time as funds will be made available by the City Controller. The money is to be derived by the sale of bonds.

Gramley Named Chief of Aurora, Ill.—Lloyd Gramley has been appointed Chief of the Aurora, Ill., Fire Department to succeed Chief Herman J. Lohmann. Chief Gramley has been with the Fire Department since May 17, 1908.

Minneapolis May Buy Aerial Ladders—Minneapolis is considering the purchase of two aerial ladders. R ecommendations for the purchase of these units were made some time ago by Chief C. W. Ringer.

Absecon, N. J., Votes for City Department—Against the objections of the Mayor and representatives of the volunteer firemen, Absecon, N. J., voted to establish a city Fire Department.

Community Apparatus Planned for Anamosa, Ia.—A special fire unit for the protection of rural property is being considered by Anamosa, Ia. The apparatus would protect property within an eight miles radius of Anamosa.

Barry Wants to Sell Stations—Edwin D. Barry, Safety Director, Cleveland, Ohio, wants to sell fire stations that may be located on valuable property or heavily traveled streets.

Darlington, Wis., to Have Community Apparatus—After a thorough investigation of the problem, the Council of Darlington, Wis., has decided to purchase community fire apparatus.

Apparatus Delivered to Elkhorn. Wis.—Fire apparatus purchased by the townships of Sugar Creek, LaFayette and Lake Geneva has been delivered to Elkhorn, Wis., from which place it will respond to fire calls.

Whitewater, Wis., to Give Fire Aid—Whitewater, Wis., has contracted to furnish fire protection to the townships of Whitewater, Richmond, La Grange, Lima and Coldspring. The charge will be $200 a year and $10 a fire. The contracts will be in force for ten years.

Sheridan, Wyo., to Establish Charges for Runs—Conferences have been held in Sheridan, Wyo., to establish a scale of rates for aid given outside of the corporate limits. Last year over ten per cent of the runs were for calls outside of the limits.

Nampa, Ida., May Protect Rural Property—Nampa, Ida., is considering the purchase of apparatus to be used in the protection of rural property. The special apparatus is to carry 250 gallons of water. No definite action has been taken.

Fayette County Contracts for Fire Service—An agreement has been signed by Fayette County and Lexington, Ky., whereby Lexington will house and operate a $10,000 fire unit recently purchased by the county for the protection of property in the county outside of the limits of Lexington.

Bakersfield, Cal., Against Motorist Offenders—Bakersfield, Cal., has started a drive to arrest all motorists who fail to heed the warning sirens of fire apparatus. The first one brought to trial was sentenced to ninety days in jail but he was later given a suspended sentence.

A. D. Harris, Ex-Chief of Tiffin, O., Dead—Albert D. Harris, for fifteen years Chief of the Tiffin, Ohio, Fire Department was stricken with a stroke of apoplexy and died in Huntington, Ohio, at the age of fifty-nine. He is survived by his widow, a son and daughter, and a number of brothers and sisters.

Apparatus to be Purchased for Napa County—The Supervisors of Napa County, Cal., have agreed to an arrangement whereby Napa County and the city of Calistoga will join in the purchase of fire apparatus. The county will pay $3,000 and the city will contribute $4,130. The city will equip, maintain and operate the fire unit.

Dell Rapids, S. D., to Protect Farmers—Dell Rapids, S. D., and the farmers of the community, combined to purchase fire apparatus to be used in protecting the rural district. Boyer apparatus was purchased and it will carry two 40-gallon chemical tanks. The apparatus will be housed in Dell Rapids and will be maintained by the city.

Seattle Widow Wins Pension Rights—The court has ordered the Seattle Firemen's Relief and Pension Fund to continue to pay a regular pension to the widow of a former member of the Fire Department. The man died from injuries received out of his line of employment and after he had been retired on a pension.

Vallejo Plans to Disband Four Companies—In order to save $1,000 a year in operating expenses, Vallejo, Cal., is planning to disband four volunteer fire companies that have been in existence for almost fifty years. It is said that neighbors of these four stations have been complaining concerning the excessive noise and rowdyism of the volunteer firemen.

PROPOSED IMPROVEMENTS

Burlington, N. J.—Council passed ordinance appropriating $18,000 for purchase of 75 foot hook and ladder truck for Young American Fire Co.

Campbell Hall, N. Y.—Special election is to be held Sept. 2 to vote on $5,000 bond issue for purchase of fire apparatus, according to reports.

Eastport, N. Y.—Eastport Fire District voted to purchase pumper for fire department at cost of $6,000.

Rochester, N. Y.—Northeast Improvement Association to petition for fire station in 18th ward. Donald A. Dailey, Public Safety Commr.

Kenton, Ohio—Reports state movement has been started for purchase of fire apparatus for rural protection.

Eugene, Oregon—Council to purchase additional fire hose, according to reports.

Position Wanted

Young married man having years of experience on American-La France fire engines desires position as department mechanic. Address: Box 410, c/o FIRE ENGINEERING, 24 West 40th St., New York City
8-19

Proposals for 500 Gallon Pumper
RIVERDALE, MD.

Bids received 8 P.M. August 24th

The Mayor and Common Council of Riverdale, Maryland are desirous of securing bids on a Standard 500-gallon Pumper Fire Engine. Bids will be opened at the Fire Engine House, Riverdale, August 24, 1931, at 8 P.M. All communications regarding the matter should be addressed to

R. P. Caruthers, Town Clerk,
8-19 Riverdale, Md.

CONVENTION DATES

Aug. 18-21—FIREMEN'S ASSOCIATION OF THE STATE OF NEW YORK. 59th Annual Convention, Troy, N. Y. Secretary, Fred A. Davis, Fort Edward, N. Y.

Aug. 21-23—CONNECTICUT STATE FIREMEN'S ASSOCIATION. 48th Annual Convention, Cameo Theatre, Campbell Ave., West Haven, Conn. Secretary, D. W. Hartford, 10 Chestnut Street, So. Norwalk, Conn.

Aug. 24-27—NORTH CAROLINA STATE FIREMEN'S ASSOCIATION. 44th Annual Convention and Tournament, Statesville, N. C. Secretary, John L. Miller, Concord, N. C.

Sept. 1-3—KENTUCKY FIREMEN'S ASSOCIATION. 12th Annual Convention, Louisville, Ky. Secretary, Captain S. G. Render, Fire Department, Louisville, Ky.

Sept. 3-4—WISCONSIN STATE FIRE CHIEFS' ASSOCIATION. 2nd Annual Convention, Portage, Wis. Secretary, Chief A. J. Rahn, Two Rivers, Wis.

Sept. 7—NATIONAL FIREMEN'S PARADE. 9th Annual Parade, Labor Day, Washington, D. C. Address, Sergt. A. J. Bargagni, Marshal, D. C. Fire Dept. Training School, Washington, D. C.

Sept. 8-10—ILLINOIS FIREMEN'S ASSOCIATION. 44th Annual Convention, Murphysboro, Ill. Secretary, Assistant Chief Roy W. Alsip, Champaign, Ill. Exhibit information, Chief Albert Herring, Murphysboro. Also, 1st Annual Convention, Ladies' Auxiliary of Illinois Firemen's Association. Secretary, Mrs. R. W. Alsip, Champaign.

Sept. 8-9—IOWA FIREMEN'S ASSOCIATION and IOWA FIREMEN'S FUNERAL AID ASSOCIATION. 54th Annual Convention, Audubon, Ia. Secretary, Paul A. Soener, Independence, Ia.

Sept. 14-16—ARKANSAS STATE FIREMEN'S ASSOCIATION. 10th Annual Convention and 2nd Annual Drill School, Marion Hotel, Little Rock, Ark. Secretary, H. D. Compton, Central Fire Station, Little Rock.

Sept. 18-19—NEW JERSEY STATE FIREMEN'S ASSOCIATION. 54th Annual Convention, Atlantic City, N. J. Secretary, William Exall, Room 602, Chamber of Commerce Building, Newark, N. J.

Sept. 18—NEW JERSEY STATE FIRE CHIEFS' ASSOCIATION. Annual Meeting, 8 p. m., Atlantic City Auditorium, Atlantic City, N. J. Secretary, Fred. A. Trowbridge, 17 South Street, Morristown, N. J.

Sept. 21-23—TENNESSEE FIREMEN'S ASSOCIATION. 1st Annual Convention, Nashville, Tenn. Secretary-Treasurer, Joe J. Martin, Nashville, Tenn.

Sept. 21-25—NORTHWEST FIRE SCHOOL. 4th Fire School, University of Minnesota, Minneapolis, Minn. Address, Director of School, Room 16, University Library, Minneapolis.

Sept. 22-24—MASSACHUSETTS STATE FIREMEN'S ASSOCIATION. 52nd Annual Convention, Lynn, Mass. (Sessions at New Ocean House, Swampscott.) Secretary, Daniel J. Looney, Room 1043, Old South Bldg., Boston, Mass.

Sept. 24-26—LOUISIANA STATE FIREMEN'S ASSOCIATION. 26th Annual Meeting, Haynesville, La. A. J. Bethancourt, Secretary, Houma, La. J. C. McEachern, Haynesville, La., Exhibit Information.

Oct. 6-8—FIREMEN'S ASSOCIATION OF THE STATE OF PENNSYLVANIA. 52nd Annual Convention, Wilkes-Barre, Pa. Secretary, Charles E. Clark, 411 Bellevue Ave., Wayne, Pa.

Oct. 14-17—INTERNATIONAL ASSOCIATION OF FIRE CHIEFS. 59th Annual Convention, Plaza Hotel, Havana, Cuba. Meeting Hall, Asturiano Club. Recording Secretary, Chief James J. Mulcahey, Yonkers, N. Y.; Executive Secretary, Jay W. Stevens, 1014 Merchants' Exchange Bldg., San Francisco, Cal.; Chairman, Exhibit Committee, Chief Charles A. McGinley, East Orange, N. J.

Oct. 15—MISSOURI VALLEY ASSOCIATION OF FIRE CHIEFS. Annual Convention, Havana, Cuba, at same time as I. A. F. C. Secretary, Chief Ray Tiller, Waterloo, Ia.

Oct. 20-22—NEBRASKA STATE VOLUNTEER FIREMEN'S ASSOCIATION. 50th Annual Convention, Norfolk, Neb. Secretary-Treasurer, H. A. Webbert, Kearney, Neb.

Oct. 20-22—RAILWAY FIRE PROTECTION ASSOCIATION. 18th Annual Meeting, Cleveland, Ohio. Secretary-Treasurer, R. R. Hackett, Baltimore & Ohio Railroad, Baltimore, Md.

Oct. 28—FIRE CHIEFS' EMERGENCY PLAN OF WESTCHESTER COUNTY, N. Y. Monthly Meeting, Fire Headquarters, Peekskill, N. Y. Secretary-Treasurer, E. Riviere, Fire Headquarters, Larchmont, N. Y.

May 11, 1932—DEL-MAR-VA VOLUNTEER FIREMEN'S ASSOCIATION. 3rd Annual Convention, Cape Charles, Va. Secretary, W. A. Karpa, Cape Charles, Va.

June, 1932—NORTHWESTERN OHIO VOLUNTEER FIREMEN'S ASSOCIATION, 60th Annual Convention, Gibsonburg, Ohio, (exact date to be decided later.) Secretary, Harry Smith, Supt., Water Works, Port Clinton, Ohio.

June 21-24, 1932—ILLINOIS FIRE COLLEGE. 8th Annual College, University of Illinois, Champaign-Urbana, Ill. Director, Prof. L. H. Provine, Secretary, Asst. Chief Roy W. Alsip, Fire Department, Champaign, Ill.

Department and Other Reports Received

Savannah, Ga.—Typewritten report of the 1930 fire losses of Savannah, Ga.

Marshfield, Ore.—Annual report of Chief of Fire Department, Marshfield, Ore.; nine pages.

Singapore, Fire Department—Annual report of the Singapore Fire Department; five pages and cover.

Association of Spanish Municipalities—Report of the Union de Municipios Espanoles; illustrated, sixteen pages and cover.

Philadelphia Fire Insurance Patrol—Sixty-first annual report of the Philadelphia Fire Insurance Patrol; fifty pages and cover.

Charleston Board of Fire Masters—Annual report of the Board of Fire-Master, Charleston, S. C.; twenty-four pages and cover.

Fire Department, Fitchburg, Mass.—Fifty-eighth annual report of the Fire Department, Fitchburg, Mass.; sixteen pages and cover.

Baltimore Salvage Corps—Fifty-sixth annual report of the Fire Insurance Salvage Corps of Baltimore, Md.; twenty-eight pages and cover.

New South Wales Fire Department—Annual report of the Board of Fire Commissioners, New South Wales, Australia; thirty-three pages.

Maryland State Firemen's Association—Proceedings of the Thirty-Eighth Annual Convention held in Baltimore; illustrated, 128 pages and cover.

Indiana Firemen's Association—Illustrated report of the fourteenth annual convention, Indiana Firemen's Association, held in Lafayette; sixty-seven pages and cover.

Fire Department of Vienna, Austria—Feuerwehr der Stadt Wien, covering the period from January, 1920, to December, 1929; illustrated, 330 pages and cover. This report is printed in German.

Montana State Firemen's Association—Proceedings of the Thirty-ninth annual convention of the Montana State Firemen's Association convention held in Missoula, Montana; twenty-nine pages and cover.

Nebraska State Volunteer Firemen's Association—Proceedings of the forty-ninth annual convention of the Nebraska State Volunteer Firemen's Association held at Scottsbluff, Neb.; 125 pages and cover.

Northwestern Ohio Volunteer Firemen's Association—Year book of the Northwestern Ohio Volunteer Firemen's Association containing details of the 1930 convention at Napolean; illustrated, seventy-six pages and cover.

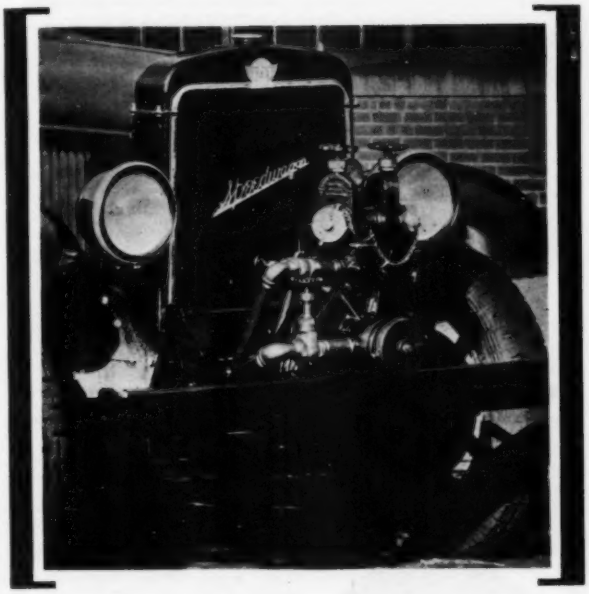
Pennsylvania Firemen's Association—Proceedings of the fifty-first annual convention of the Firemen's Association of Pennsylvania held in Allentown; also contains a list of communities by county and the amount paid to the relief fund from the two per cent insurance tax; 120 pages and cover.

Montreal Flour Warehouse Destroyed

Six firemen were seriously injured while fighting a fire that destroyed the warehouse of the Western Canada Flour Company in Montreal, Canada, recently. An entire ladder company was almost annihilated by a falling wall. One lieutenant had both legs broken.

Fire started in the grain elevator at one corner of the building at 3:50 a. m. Floors of the warehouse were weighted down with thousands of tons of flour. Chief Gauthier was at the scene early, and ordered two more alarms to be sent, making three in all. Special precautions were taken to prevent the east wall from falling as that would have spread the flames across the street. Seventeen fire companies were called out.

The warehouse covered an entire city block and parts of it were dangerously near a cigar box factory. The fire loss was estimated at $500,000.



500 g. p. m.

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As primary pumping apparatus in the smaller towns and as auxiliary equipment in the larger centers, this U-45 Pump offers advantages of first importance.

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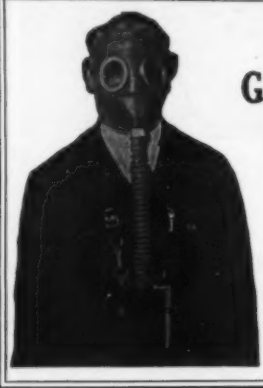

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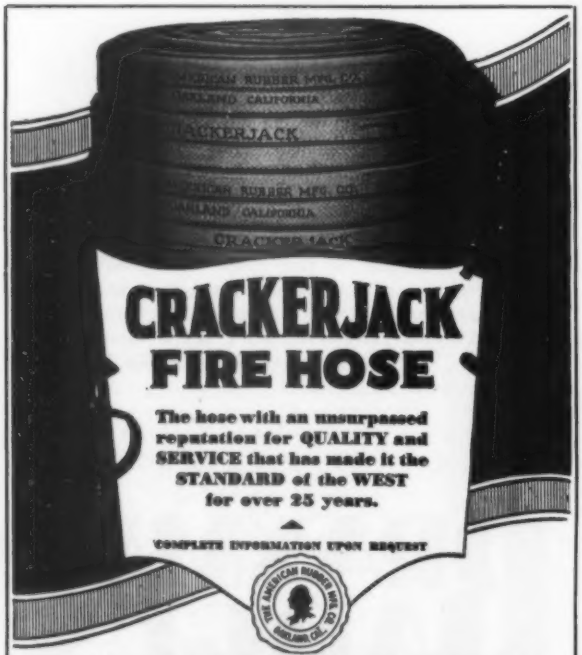
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FIRE ENGINEERING
24 West 40th Street New York City

Fire Equipment for Small Towns

(*Continued from page 606*)

motor equipment consists of only first aid, it should carry at least 250 feet of chemical hose.

There should be some sort of equipment to smother oil and gas fires, foam type, even if only of the hand form; hand extinguishers of the soda acid type, tetrachloride and carbon dioxide. They will all find a place sooner or later. There should be an equipment of mattocks, shovels, spades and back tanks with hand pumps for grass and forest fires and wire brooms for the same purpose. There should be one or two salvage covers to protect property from water damage and save removal, as moving always causes damage.

To emphasize the motor equipment, men who go to a fire on such equipment are worth something when they get there. In the old days of hand drawn apparatus, which I imagine some towns may still have, men were exhausted before they reached the fire, and were useless for a time.

Training the "Mental Equipment" of the Small Town

The work of fire fighting should be made interesting to the men. There should be a meeting of the whole membership at least once a month. At these meetings subjects should be taken up in relation to local conditions; lectures on fire fighting methods, hydraulics and ladder methods, and ventilation of different types of buildings should be given. If you can have several visits during the winter from Chiefs of other departments to tell your men what to do under certain conditions, it would make the meetings interesting, and the men would look forward to the monthly meeting. You will find they will soon begin to ask for different subjects. Meet their request when possible. Too much emphasis cannot be stressed on the idea of locating the seat of the fire before using any sort of extinguishing agent. It is surprising in what a short time you will find the men doing just the things you have talked to them about, and they perform it unconsciously, as if it is the natural thing to do.

The Teaching of First Aid Methods

There should be men instructed, no matter how small the department, in the care of the injured by first aid methods and there should be a first aid kit on some piece of apparatus, ready for use.

Week ends and holidays are trying times for a small town Chief. The men, being call men, cannot be held in town, and with the automobile, a general exodus takes place for the holiday. Arrangements should be made, so that certain men should remain in town, even if they have to be paid for doing so. It is money well spent, for the town must have protection.

The monthly meeting in the summer season can be diverted to practice drills with the apparatus. The men like it; they like to show how good they are according to their own ability. This covers briefly the subject of equipment.

The Richmond, Me., Fire Department

In connection with the subject matter it might be of interest to you to have an outline of what we have done in Richmond. Richmond is a town of 2,000 inhabitants. Up to 1926 it had only hand drawn apparatus and a volunteer department—three hose carts carrying 400 feet of hose each and two hand chemicals each with a hand drawn hook and ladder truck. The fire alarm was the continuous ringing of bells on each hose house. After the advent of the automobile, someone who owned a car would go to a hose house when the fire bells rang and tow the hose cart to the fire. Sometimes there might be a fireman there and sometimes not. Anyway, the hose got there, the village was protected with hydrant service of good supply and fair pressure, but there was not any apparatus with which to go into the country, and they did not go. Fires were drowned out from the outside generally, as the water supply held out, and no thought was given to water damage. In 1926, interested and progressive citizens organized a corporation and solicited funds to purchase motor driven equipment. They were successful in raising $2,000 and the purchase of a triple combination truck with booster tank was sought. The town was asked if they would accept and maintain such a piece if purchased and voted to accept it, and a triple combination was purchased for $4,500 paying down $2,000 and the corporation giving their notes for the remainder.

The truck was delivered in May, 1927. In June, 1927, a special town meeting was called and a town ordinance was passed under the state laws organizing a regular Fire Department and doing away with the volunteer department.

In February, 1928, we lost our high school building. A fire of undetermined origin on the inside of the building, on a Sunday evening, had completely destroyed the interior before it was known. An explosion which blew out the windows and doors and wrecked the interior was the first sign that a fire was in progress. It was because of this fire, that the people were brought to realize, what this new apparatus meant to the town, as after it reached the fire location it supplied three lines of 2½-inch hose, pumping five consecutive hours, at the rate of 300 gals. per minute and saved all property adjoining the high school building, which consisted of a church on one side and a residence on the other. At the annual town meeting the next month, the town voted to take over the remaining payments on this piece of apparatus and it became town property. I mention this to give you an idea of what must happen to make the people, upon whom the small town depends for its fire equipment appropriations, realize that modern apparatus is necessary. In other words we had to lose a valuable piece of property to bring them to their senses.

New Chief Takes Hold

Following the town meeting the department elected a new Chief by the power of the ordinance, and this new Chief outlined to the men what he would like to do, but that it could not be done without the moral and physical support of the men of the department. The men voted to back him and a real department was started. Funds were derived from entertainments and fairs and in the fall of 1928, we had a completely motorized department, the men doing the work on a chassis that was purchased. In 1929, one hose truck was made a combination hose and salvage squad, salvage covers and other equipment being purchased; then we added equipment to fight grass and forest fires. At first this consisted of wire brooms, shovels, spades, etc., later knapsack tanks with hand pumps and every kind of extinguishing agent in hand chemicals were added. More hose was purchased, so that each truck carries 500 feet and the pumper 1100 feet of 2½-inch hose and 150 feet of 1½-inch.

Special Instruction

Lectures and instructions were given the men at monthly meetings, practice drills were carried out in the summer, ten men took the American Red Cross course in first-aid and received certificates, grappling irons were made for use in drowning accidents, and the department now answers calls for accidents of any nature when doctors are not available. One or two automobile accidents have received first-aid treatment from our men; two drowning accidents have been served, and bodies recovered.

The men have been instructed to clean up after a fire, leaving the premises in the best possible condition and have been highly complimented on this feature. I wish here to mention the matter of instilling into the minds of the men, the necessity to locate the seat of the fire. It has been mighty satisfying to me on two occasions to see the men put out two fires in residences without using a drop of water, removing the burning material without serious damage and carrying it out doors. Our people are beginning to realize what a trained Fire Department can do for our town—trained by our own methods, to suit local conditions.

Believes in Right Kind of Publicity

In addition to the work outlined we have instituted a fire alarm system, with a master box located in the central telephone office, with twenty-four hour service. Fire inspection by members of the department has been established. We believe in publicity of the right kind, not advertising the Chief, but the department, praising the men through the public press, and talking to the public on opportune occasions. Work with the schools has been prominent. The Chief makes periodical visits to the schools and talks to the students, with the cooperation of the school department. Pamphlets are printed at intervals, treating on fire subjects. These are distributed to the students. They reach the home and it is, we believe, a definite way of reaching the public that has results. When it is considered that these changes have been brought about without expense to the town, by organized cooperation with the men, and with a department made up of all classes of trades, clerks, railroad hands, carpenters, painters, blacksmiths, laborers, show workers and spinning mill operators, it becomes self-evident, that any community can accomplish great things for itself in the line of fire protection if it really wants it. There is much mechanical equipment that we should have, but we would have to buy trailers to carry it. However, what we have has been worked

out along the lines suggested, mental, physical and mechanical.

In closing, let me leave this thought with you: Equip your small town along the lines suggested, for I believe I can truly say to you, that this method has brought to our town as efficient a Fire Department as can be found in any Maine town of 2,500 inhabitants, and perhaps in New England, and I can also assure you that I take great personal pride in the fact that I had something to do with this reorganization.

(From a paper read before the annual convention of the New England Association of Fire Chiefs at Boston, Mass.)

The Volunteer Fire Department

(*Continued from page* 610)

sustained, written notice thereof be served by mail or otherwise on the comptroller or chief financial officer of the city, the town clerk of the town, or the village clerk of the village from which issued the call for assistance and in which the fire occurred. No such claim, however, shall be allowed unless, within sixty days after such loss or damage has been sustained, written notice thereof be served by mail or otherwise on the comptroller or chief financial officer of the city, the town clerk of the town, or the village clerk of the village from which issued the call for assistance and in which the fire occurred.

3. In cities such loss or damage shall be a city charge and audited and paid as other city charges. In villages such loss or damage shall be a village charge and shall be audited and paid in the same manner as village charges, and shall be assessed upon the property and persons liable to taxation in said village, and levied and collected in the same manner as village taxes.

4. In fire districts or unincorporated territory outside of cities, villages or fire districts, such loss or damage shall be a town charge, audited and paid in the same manner as town charges and shall be assessed upon the property and persons liable to taxation in such fire districts or unincorporated territory outside of fire districts, as the case may be.

While the practice of furnishing individual aid as in the cases described, is generally frowned upon, it is not uncommon for one organized municipality to furnish aid to another village or municipality, either of the same size or smaller. The larger city, however, has objections to being called to fight brush fires for it feels that such calls can be just as well handled by the local force. In many cases where outside aid was given freely, it was found wise to establish a scale of fees for this aid in order to discourage a large number of unwarranted runs.

Unlike the case of furnishing private outside fire protection, when one municipality leaves the village limits to aid another, some apparatus is left behind for local protection. Generally only one company properly manned is sent to give outside aid, although in some cases a larger amount of assistance may be furnished.

Charges for Outside Aid

Several years ago, FIRE ENGINEERING made a survey to learn just what is being done by various cities and towns when calls come in from nearby municipalities for assistance. The survey also resulted in information concerning the charges made for outside aid.

After the replies received had been classified, they revealed that sixty-eight municipalities were glad to furnish aid to other municipalities while two did not. Of the number who furnished outside aid, fifty-two did not make any charge for their services. Fifteen chiefs indicated that they limited their outside runs, that is, stipulated the limits of their runs or stated that aid would only be given to certain territory.

Concerning the initial charge made for such protection by the cities that had established the practice of being paid for the aid given, twenty-five dollars was the common initial charge. A few of the outstanding charges are hereby outlined.

Atlanta, Ga., has a charge of $50 for the first hour and charges $25 for each extra hour. In Fredonia, N. Y., the charge is $50 for the first hour and $10 for each extra hour. Most of the other places do not have so wide a drop in rates. Milwaukee, Wis., charges $125 for the run and the first hour's work, and $100 for every extra hour per company. The sum of $300 must be deposited in the City Treasury by those communities desiring this protection. After each run, the sum must be brought up to the original deposit. If a factory is located in a town where the municipal officials failed to contract for fire service, protection is given the factory under the same arrangements.

Boonton, N. J., charges $25 for one piece of apparatus either a pumper or chemical apparatus according to the nature of the fire. This charge is made to prevent calls caused by small brush fires. In Kent, Ohio, the fee for answering rural calls is $25 for the use of the apparatus and one dollar an hour for each man responding. The chief reported that he has found it often difficult to collect this fee.

Warren, Ohio, has on the average from five to ten calls a month for outside aid and the length of the runs are from three to twenty miles. At present the charge is $75 an hour for each trip. At Rochester, N. Y., the charge is $25 for the call and $100 an hour for working at the fire. The scale in Meadville, Pa., is $50 for the first hour and $25 for every hour thereafter. The party who makes the call is held responsible for the amount.

Cincinnati, Ohio, only responds to towns that have contract arrangements with the city. The contract provides that a charge of $75 an hour be made for the use of any engine, hose wagon, ladder truck or other piece of fire department apparatus, and $25 for the services of a supervising fire marshal. No contracts are made with individuals.

In Bluffton, Ind., the charge is $25 for the first mile and $10 for each additional mile. At the fire a charge is made of $10 an hour for pumping and laying hose. When chemicals are used, the actual cost of recharging is billed. This is one of the few cost arrangements that takes into account the length of the run.

Many of the smaller municipalities do not charge for outside aid but there seems to be some kind of unwritten agreement that it is proper for the one receiving the aid to donate something to the department, either to the company or to the pension fund if there is one.

Status of Volunteer Firemen

Volunteer firemen are very much interested in their status should an injury occur while they are responding to a call outside of the village limits in order to aid an individual or town. According to a New York State law, firemen in the state can collect up to $200 for medical services and up to $700 for loss of salary while unable to work because of the injury received. The law in full follows:

> Chapter 371—Section 3: Any such volunteer fireman who shall receive injuries while performing his duties as such, while in the fire house, going to a fire or working at the fire or returning from the fire or while officially engaged in testing or inspecting the apparatus or while engaged as a member of the Fire Department emergency relief squad in performing his duties as such, in the fire house, or at a fire, or other place where emergency relief was required, or going to, or returning from a fire or other place where emergency relief was required so as to necessitate medical or other lawful remedial treatment or loss of earnings in his vocation on account thereof, shall be reimbursed for such sums as are actually and necessarily paid for medical or other lawful remedial treatment, not exceeding two hundred dollars. He shall also be reimbursed for such sums as are actually and necessarily lost in earnings for the time during which he was actually and necessarily prevented from following his vocation on account of such injuries, not exceeding, however, seven hundred dollars. No such claim shall, however, be allowed unless, within sixty days after receiving such injuries, written notice thereof be served by mail or otherwise on the comptroller or chief financial officer of the city, the town clerk of the town or the village clerk of the village in which is maintained the Fire Department of which the claimant is a member or on the clerk or fiscal officer of the municipality liable therefor.

Acknowledgment

For all references to New York State laws, the author is indebted to D. S. Mersereau, Town Clerk, Union, N. Y., and a member of the Law Committee, New York State Fire Chiefs' Association.

Mamaroneck, N. Y., Firemen Win Point—Volunteer firemen of Mamaroneck, N. Y., are to receive apparatus of their selection. Village Manager Richards has consented to purchase their choice of apparatus.

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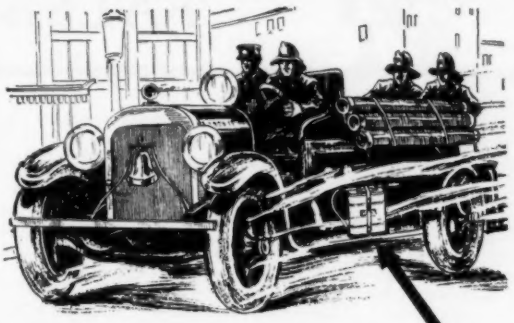

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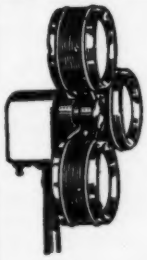

BUCKEYE "ROTO-RAYS"—A silent signal of unquestioned effectiveness to protect your apparatus and your firemen against accidents.

At night these three revolving red signal lights make identification of the apparatus instantly possible as far as light is visible.

Insist upon having "Roto-Rays" on the next piece of apparatus you buy. It's just as essential as the whistle, the siren or the bell. Easily installed on apparatus now in service.

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The shrill blast of a Buckeye Whistle effectively carries far ahead of the apparatus. Its sound is distinctive and extremely penetrating.

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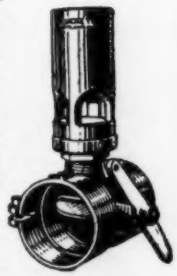

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WARNING SIGNALS THAT WARN

FALSE ALARMS

NO WONDER

An old veteran smoke-eater, also a great admirer of John Barleycorn, was ordered to bed after working at a nasty cellar fire. The doctor ordered his patient to take whiskey but impressed on him that unless he took it with hot water, it would do him more harm than good.

"How am I to get the hot water?" asked the patient. "My wife is against my drinking, and if she knows its for whiskey she won't let me have the hot water."

"Oh, just tell her you want it for shaving," replied the quick-thinking doctor.

When he called next day and asked the wife about the patient, she answered:

"I'm worried, doctor. I'm afraid he's gone mad because he wants to shave every ten minutes."

In a speakeasy the customer's always right and he's usually willing to prove it.

WASTED EFFORT

One of the boys had a cheap watch that he dropped on the concrete apparatus floor while polishing the brasswork. He took it to the nearby watch repairer. As the man was examining the timepiece, its owner said:

"The mistake I made, of course, was in dropping it."

"Well, I don't suppose you could help that," said the jeweler. "The mistake you made was in picking it up."

If two heads are better than one, why don't they put two heads on hammers?

SCANDALOUS

Crowds are not difficult to attract, especially if several pieces of fire apparatus are parked near the curb. Stretched out on the street was a woman who was overcome by leaky gas from a domestic refrigerator. To a request for information, some woman in the crowd said:

"She fainted and was resuscitated."

"I know one thing," said a flapper, "if I was a lady I'd be careful of those firemen."

WRONG ORDERS

In preparation for the anniversary parade, old Jerry on the city horse farm was to have special attention. The Chief sent a note to the man in charge of this city farm. Some time after the note was delivered the Chief called:

"Did you get the note I sent down for the horse?"

"Yes, sir," answered the other party, "and we carried out your order."

"Fine. Send the horse over immediately.

"Yes sir, Chief. Shall we send him by truck?"

"No you fool, let him walk."

Pause.

"Say would you please repeat what you had written on that note?"

"My orders were 'Have Jerry shod right away!"

"Oh, was that a 'd'—I thought it was a 't'."

"How far are you going?" asked the coy young thing as the car jerked to a standstill on the lonely road.

TRUE TO TYPE

A fire company is often a peculiar assembly of individuals, often times an assembly of different nationalities. A Scotchman was a member of a suburban company, and frequently he reverted to type. As for example the time when one of the boys shouted that a cow had wandered into their backyard.

"What are you standing there and hollering," said the Scot. "Get back there and milk it before it gets out."

ANOTHER ONE

On his day off, he took his rod, his package of lunch and went fishing. When he came home, he showed his wife the fish that he had caught.

"Don't try to put that over," said his doubtful wife. "Mrs. Smith saw you in the fish store."

"Sure she did," he replied. "I caught so many I had to sell some."

A woman can make a fool of a man in ten minutes. Ah, but think of those ten minutes.

A GOOD WORLD

Regardless of what others may say, the rewards of life are generally balanced. For example, it is said that the advent of the auto has increased profanity at least fifty per cent. But then think of how it has cut down horse stealing.

If a motorist stops his car too short he is likely to go through the windshield. If he doesn't, the pedestrian is.

COMPLETELY FULL

She called at the Compensation Board to give facts concerning the injury to her husband when he fell down an open hoistway at a fire.

"Your husband's name, please," said the clerk.

"Pat."

"I want his full name," answered the clerk.

"Well sir, when he's full he thinks he's Gene Tunney, but when I lay my hands on him, he's just plain Pat again."

QUICK RESULTS

"And do spectacles help your eyes any?" he was asked when he came back from the oculists.

"Do they! They've kept three guys from hitting me."

FIRE FIGHTIN' IS SURE A SCIENCE NOW DAYS! LOT DIFFERENT WHEN I WUZ A MEMBER OF THE HOSE COMPANY!
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3 Acid Jars and Rings.
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5 Aerial Trucks.
6 Alarms, Siren, Electric.
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8 Alarm Systems, Municipal Telegraphic.
9 Alarms, Thermostatic.
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12 Banners, Trumpets, etc.
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14 Battery Zincs for Fire Alarm Batteries.
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16 Body Equipments.
17 Boxes, Gongs, Reels, Registers, Fire Alarm.
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19 Brake Linings.
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21 Building Materials, Fire Retardant.
22 Caps, Firemen's.
23 Chains, Non-Skid Fire Apparatus.
24 Chassis for Fire Apparatus.
25 Chemical Engines and Tanks.
26 Chimney Fire Fusees & Compounds
27 City Service Trucks.
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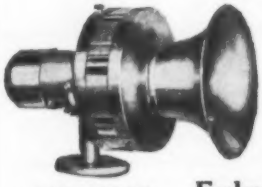

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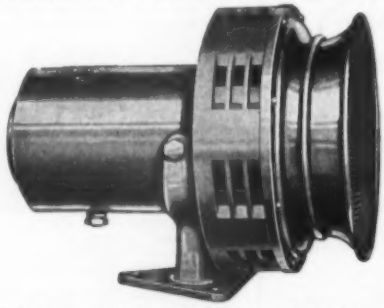

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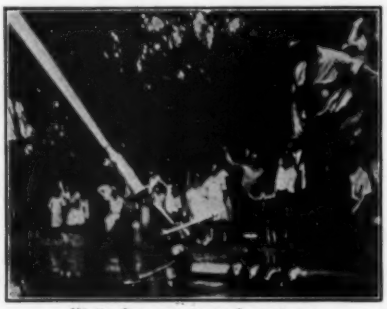

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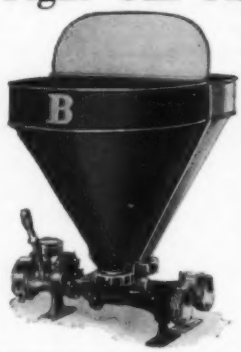

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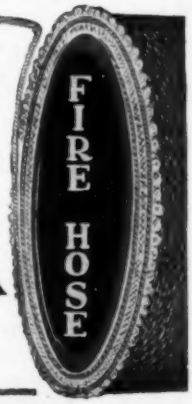

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